



CITY OF HARRISONBURG
**PUBLIC
WORKS**

320 EAST MOSBY ROAD, HARRISONBURG, VA 22801

OFFICE (540) 434-5928 • FAX (540) 434-2695

April 29, 2024

Megan O’Gorek
Department of Environmental Quality
4411 Early Road
Harrisonburg, VA

Subject: City of Harrisonburg General VPDES Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (VAR040075)

Ms. O’Gorek

Please find attached the City of Harrisonburg’s MS4 Program Plan for November 1, 2023 through October 31, 2028.

Please do not hesitate to contact Public Works should you have any questions at (540) 434-5928 or Keith.Thomas@harrisonburgva.gov

Sincerely,

Keith Thomas
Public Works Sustainability and Environmental Manager

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Allyson Galt 4/24/2024
Responsible Official Signature Date

VAR040075

City of Harrisonburg, VA

Permit Number

MS4 Name



Harrisonburg
VIRGINIA



MS4 Program Plan

Reporting Period: November 1, 2023 - October 31, 2028
Permit Number: VAR040075

In compliance with the Virginia Stormwater Management Program (VSMP) and General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4)

Revised 2/29/2024

Table of Contents

Introduction	5
Watersheds	6
Roles and Responsibilities.....	9
Contact Information.....	10
MS4 Program Plan	11
Minimum Control Measure #1: Public Education & Outreach	12
BMP 1.1: Develop and Implement a Public Education and Outreach Program.....	12
Minimum Control Measure #2: Public Involvement and Participation	16
BMP 2.1: Plan for, Respond to, and Document Public Input, Complaints and Reports	16
BMP 2.2: Update and Maintain a Stormwater Webpage	18
BMP 2.3: Implement Four Public Involvement Opportunities	19
Minimum Control Measure #3: Illicit Discharge Detection and Elimination	22
BMP 3.1: Develop and Maintain a Storm Drain System, Outfalls, and Information Map	22
BMP 3.2: Prohibit Illicit Discharges and Connections through Ordinance Language	23
BMP 3.3: Maintain and Implement Illicit Discharge Detection and Elimination Written Procedures	23
Minimum Control Measure #4: Construction Site Stormwater Runoff Control.....	25
BMP 4.1: Use Legal Authority to Address Discharges Entering the MS4.....	25
Minimum Control Measure #5: Post-Construction Stormwater Management for New Development and Development on Prior Developed Lands	28
BMP 5.1: Implement the VSMP	28
BMP 5.2: Inspection and Maintenance Program for City Owned Stormwater Management Facilities	29
BMP 5.3: Inspection and Maintenance Program for Privately Owned Stormwater Management Facilities.....	30
BMP 5.4: Track and Report Stormwater Management Facilities	31
Minimum Control Measure #6: Pollution Prevention and Good Housekeeping for Facilities Owned or Operated by the Permittee.....	33
BMP 6.1: Maintain and Implement Written Procedures for Pollution Prevention and Good Housekeeping	33
BMP 6.2: Pollution Prevention by Contractors	34

BMP 6.3: Stormwater Pollution Prevention Training Plan.....	35
BMP 6.4: Stormwater Pollution Prevention Plans	36
BMP 6.5: Turf and Landscape Nutrient Management Plans.....	39
TMDL Special Conditions	41
Chesapeake Bay TMDL Special Condition	41
Local TMDL Special Conditions	42
Appendix A: Public Input Reporting and Standard Operating Procedures.....	44
Reporting Procedures	44
Input Procedures.....	44
Responding to Public Input or Complaints	44
Documentation	45
Appendix B: Public Education and Outreach Plan	46
Chesapeake Bay High Priority Issues Outreach Plan.....	46
High Priority Stormwater Issue 1: Chesapeake Bay Nutrients.....	46
High Priority Stormwater Issue 2: High Quality Receiving Waters	46
High Priority Stormwater Issue 3: Litter and Trash.....	47
Priority Audiences.....	48
City Schools	48
Downtown Restaurants	48
Local TMDL.....	49
Pollutant of Concern 1: Nutrients	49
Pollutant of Concern 2: Sediment.....	50
Pollutant of Concern 3: Bacteria	51
Appendix C: Physical Interconnection Notice Letters.....	52
Appendix D: Dry Screening and Outfall Inspection Methodologies	54
General Overview	54
Pre-Inspection Procedure	54
Inspection Procedure.....	54
Appendix E: IDDE Investigation Process	56
Appendix F: VSMP Approval Letter.....	66
Appendix G: Written Procedures for Operations and Maintenance Activities on City-Owned Stormwater Management Facilities.....	67

General Overview 67

Stormwater Post Construction Inspection Procedure 67

Appendix H: Written Procedures for Inspection of Privately Owned Stormwater Management Facilities 69

Appendix I: Written Procedures for Compliance and Enforcement of Inspection and Maintenance
Requirements for Privately Owned Stormwater Management Facilities..... 70

Appendix J: Good Housekeeping Standard Operating Procedures 76

Appendix K: Stormwater Pollution Prevention Training Plan..... 127

Introduction

The City of Harrisonburg is an independent city located in the Shenandoah Valley of the Commonwealth of Virginia and is surrounded by Rockingham County. The City is an operator of a Small Municipal Separate Storm Sewer System (MS4). A *municipal separate storm sewer* means “a conveyance or system of conveyances otherwise known as a municipal separate storm sewer system, including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains:

1. Owned or operated by a federal, state, city, town, county, district, association, or other public body, created by or pursuant to state law, having jurisdiction or delegated authority for erosion and sediment control and stormwater management, or a designated and approved management agency under § 208 of the CWA that discharges to surface waters;
2. Designed or used for collecting or conveying stormwater;
3. That is not a combined sewer; and
4. That is not part of a publicly owned treatment works.”

The US Census in 2010 determined the City’s population to be 48,914, that the City is within an Urbanized Area, and thus subject to the amended and reissued General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems, which became effective November 1, 2023 and will expire on October 31, 2028 when a new permit cycle is expected to become effective.

The MS4 Permit requires the City to develop and MS4 Program Plan (this document), and to submit Annual Reports for each period between July 1 through June 30. Modifications to the MS4 Program Plan are expected throughout the life of the permit as part of the iterative process to reduce pollutant loadings and to protect water quality. The City’s MS4 Program Plan and Annual Reports available on the City’s Stormwater webpages: <http://www.harrisonburgva.gov/stormwater-management-program>.

Additional information on the laws and regulations affecting the City and its operation of an MS4 can be found in:

- Virginia Stormwater Management Act, Article 2.3 (§62.1-44.15-24 et seq.) of Chapter 3.1 of Title 62.1 of the Code of Virginia
- Virginia Administrative Code, 9VAC25-870, Virginia Stormwater Management Program (VSMP) Regulations
- Virginia Administrative Code, 9VAC25-890-40, General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems
- Virginia Department of Environmental Quality, Municipal Separate Storm Sewer Systems, <https://www.deq.virginia.gov/permits-regulations/permits/water/municipal-separate-storm-sewer-system-permit-ms4s-stormwater>

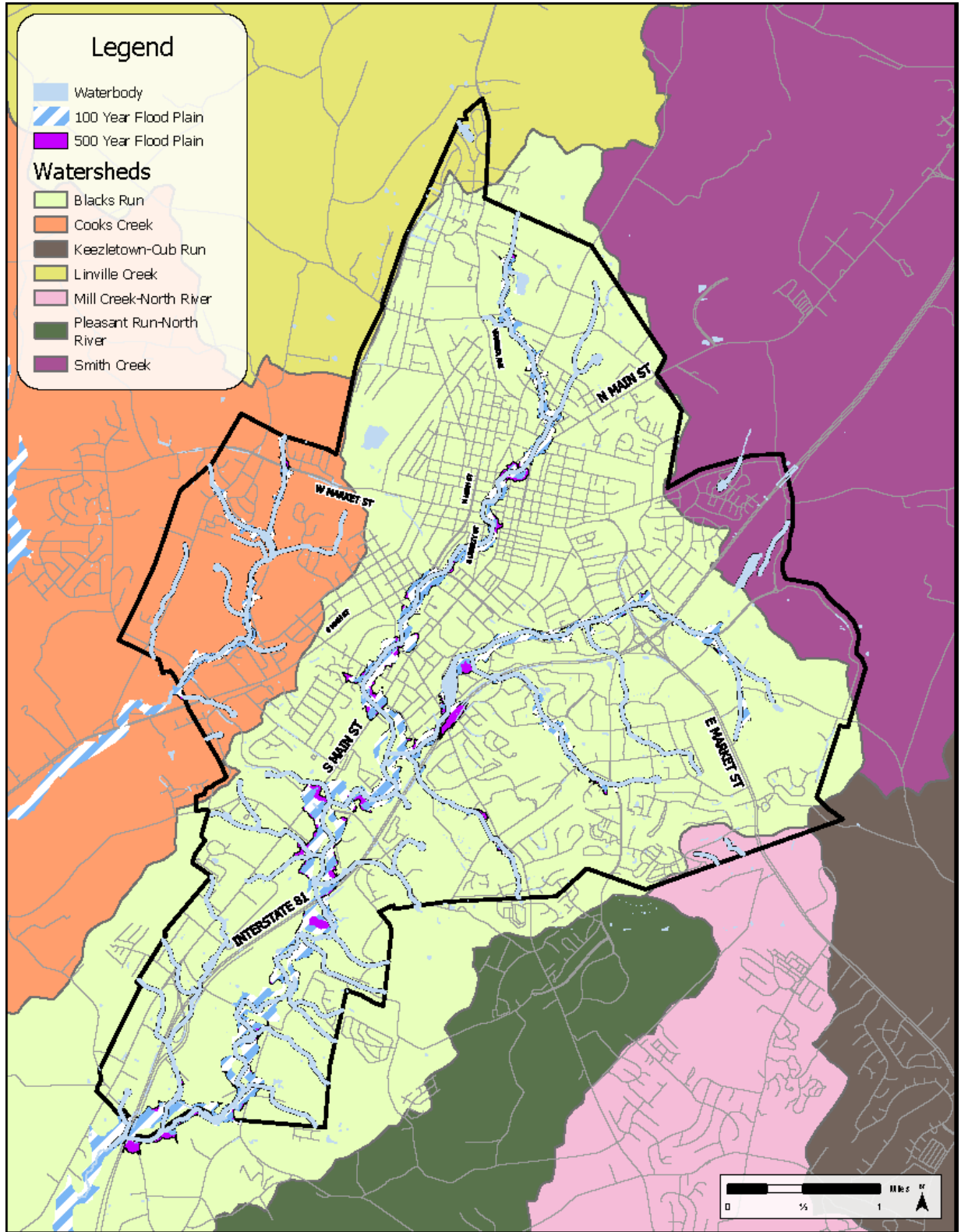
Watersheds

The City of Harrisonburg's 17.4 square miles is highly urbanized with substantial amounts of impervious surface. The following table describes approximate stream length, drainage areas, and impairments for each watershed within Harrisonburg city limits.

Table 1. Subwatersheds in Harrisonburg

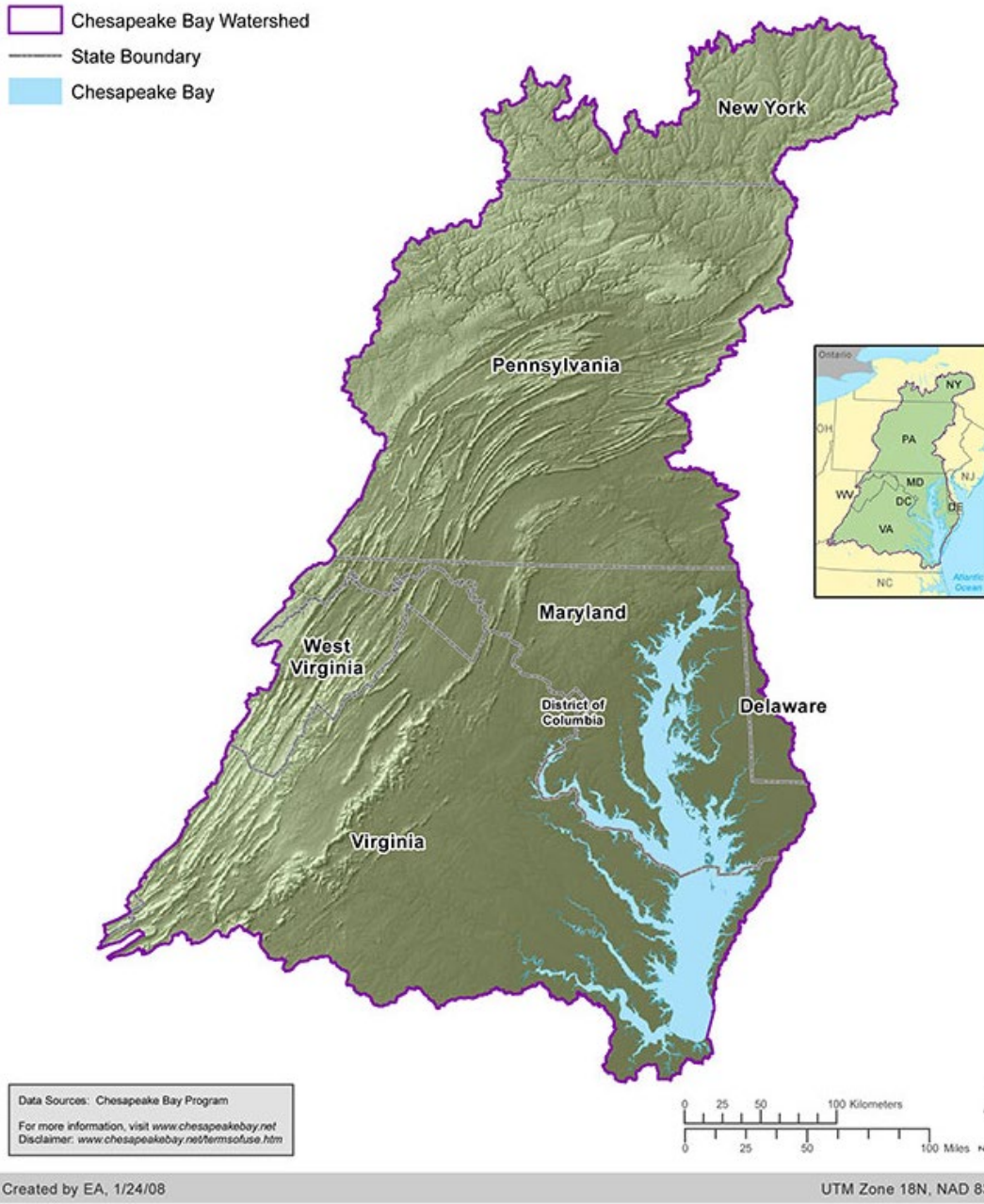
Subwatershed Name	Hydrologic Unit Code (HUC)	Approximate Length (miles) within Harrisonburg	Approximate Drainage Area (acres)	Impairments	TMDL WLA?
Blacks Run (<i>flows into Cooks Creek</i>)	PS22	8.67	9067	Fecal Coliform, Sediment, Total Phosphorus	No
Sunset Heights Branch of Cooks Creek	PS23	2.09	1347.58	Fecal Coliform, Sediment, Total Phosphorus	No
Dry Fork (<i>flows into Smith Creek</i>)	PS59	0.206	493	E. Coli, Sediment	Yes, 2004
North River-Mill Creek	PS26	No stream	87.44	E. Coli	No
Cub Run (<i>flows into South Fork of Shenandoah River</i>)	PS33	No stream	14.75	E. Coli	No
Linville Creek (<i>flows into North Fork of Shenandoah River</i>)	PS56	0.08	117.8	E. Coli, Sediment	No

Figure 1. Subwatersheds in Harrisonburg



The City of Harrisonburg also drains into the Chesapeake Bay Watershed. The Chesapeake Bay Watershed is 64,000 square miles and includes portions of New York, Pennsylvania, Delaware, Maryland, West Virginia, and Virginia. Altogether, more than 100,000 streams, creeks and rivers make up the Chesapeake Bay Watershed. As part of the Special Conditions for the Chesapeake Bay TMDL, the MS4 Permit requires the City of Harrisonburg to address impairments for phosphorus, nitrogen, and sediment that enter the Chesapeake Bay.

Figure 2. Chesapeake Bay Watershed Map



Roles and Responsibilities

The City of Harrisonburg's Public Works Department coordinates the City's municipal separate storm sewer system (MS4) program. The Public Works Department's Sustainability and Environmental Manager is responsible for developing and updating the MS4 Program Plan and submitting Annual Reports. The City Manager is responsible for providing the appropriate certification for documents. The Department of Community Development, Department of Public Utilities, the Department of Parks and Recreation, Police Department and Fire Department are the major contributors to Harrisonburg's MS4 Program although it is recognized that this is a citywide and community-wide program.

For MS4 Permit coverage, Harrisonburg City Public Schools (HCPS) and Harrisonburg Electric Commission (HEC) are covered by the City of Harrisonburg's MS4 Permit and their responsibilities are referenced throughout the MS4 Program Plan and associated Annual Reports.

Contact Information

Principal Executive Officer

Title: City Manager
Name: Alexander Banks VI
Address: 345 South Main Street
Harrisonburg, Virginia 22801
Phone: (540) 432-7701
Email: Ande.Banks@harrisonburgva.gov

Duly Authorized Representatives

Title: Director of Public Works
Name: Tom Hartman
Address: 320 East Mosby Road
Harrisonburg, Virginia 22801
Phone: (540) 434-5928
Email: Tom.Hartman@Harrisonburgva.gov

Title: Sustainability and Environmental Manager
Name: Keith Thomas
Address: 320 East Mosby Road
Harrisonburg, Virginia 22801
Phone: (540) 434-5928
Email: Keith.Thomas@harrisonburgva.gov

Title: Stormwater Compliance Specialist
Name: Shayna Carter
Address: 320 East Mosby Road
Harrisonburg, Virginia 22801
Phone: (540) 434-5928
Email: Shayna.Carter@harrisonburgva.gov

MS4 Program Plan

The MS4 Program Plan details the City of Harrisonburg's comprehensive program to manage the quality of stormwater runoff discharged from the MS4. This section of the MS4 Program plan is categorized into the following six minimum control measures and special conditions for TMDLs:

1. Public education and outreach
2. Public involvement and participation
3. Illicit discharge detection and elimination
4. Construction site stormwater runoff control
5. Post-construction runoff control for development and redevelopment
6. Pollution prevention and good housekeeping for facilities owned or operated by the permittee
7. TMDL Special Conditions: Chesapeake Bay TMDL
8. TMDL Special Conditions: Local TMDL

This MS4 Program Plan will be reviewed annually. Due to the iterative nature of the program and the potential for changes to BMPs over the permit term, the MS4 Program Plan will be updated as necessary. This MS4 Program Plan will remain on file in the Public Works Department and on Harrisonburg's stormwater webpage: www.harrisonburgva.gov/stormwater-management-program.

The MS4 Program Plan outlines the details of procedures in place to comply with the MS4 General Permit. The MS4 Program Plan is not an enforceable document.

Minimum Control Measure #1: Public Education & Outreach

BMP 1.1: Develop and Implement a Public Education and Outreach Program

Description

- a. The permittee shall implement a public education and outreach program designed to:
 - (1) Increase the public's knowledge of how to reduce stormwater pollution, placing priority on reducing impacts to impaired waters and other local water pollution concerns;
 - (2) Increase the public's knowledge of hazards associated with illegal discharges and improper disposal of waste, including pertinent legal implications; and
 - (3) Implement a diverse program with strategies that are targeted toward individuals or groups most likely to have significant stormwater impacts.
- b. The permittee shall identify no less than three high-priority stormwater issues to meet the goal of educating the public in accordance with Part I E 1 a. High-priority issues may include the following examples: Chesapeake Bay nutrients, pet wastes, local receiving water impairments, TMDLs, high-quality receiving waters, litter control, BMP maintenance, anti-icing and deicing agent application, planned green infrastructure redevelopment, planned ecosystem restoration, and illicit discharges from commercial sites.
- c. The high-priority public education and outreach program, as a whole, shall:
 - (1) Clearly identify the high-priority stormwater issues;
 - (2) Explain the importance of the high-priority stormwater issues;
 - (3) Include measures or actions the public can take to minimize the impact of the high-priority stormwater issues; and
 - (4) Provide a contact and telephone number, website, or location where the public can find out more information.
- d. The permittee shall use two or more of the strategies listed in Table 1 below per year to communicate to the target audience the high-priority stormwater issues identified in accordance with Part I E 1 b including how to reduce stormwater pollution.

Strategies	Examples (provided as examples and are not meant to be all inclusive or limiting)
Traditional written materials	Informational brochures, newsletters, fact sheets, utility bill inserts, or recreational guides for targeted groups of citizens
Alternative materials	Bumper stickers, refrigerator magnets, t-shirts, or drink koozies
Signage	Temporary or permanent signage in public places or facilities, vehicle signage, bill boards, or storm drain stenciling
Media materials	Information disseminated through electronic media, radio, televisions, movie theater, newspaper, or GIS story maps

Speaking engagements	Presentations to school, church, industry, trade, special interest, or community groups
Curriculum materials	Materials developed for school-aged children, students at local colleges or universities, or extension classes offered to local citizens
Training materials	Materials developed to disseminate during workshops offered to local citizens, trade organization, or industrial officials
Public Education Activities	Booth at community fair, demonstration of stormwater control projects, presentation of stormwater materials to schools to meet applicable education Standards of Learning or curriculum requirements, or watershed walks
Public Meetings	Public meetings on proposed community stormwater management retrofits, green infrastructure redevelopment, ecosystem restoration, TMDL development, voluntary residential low impact development, or other stormwater issues

- e. The permittee may coordinate its public education and outreach efforts with other MS4 permittees; however, each permittee shall be individually responsible for meeting all of its state permit requirements.

Specific Program Plan Requirements

The MS4 Program Plan will include:

- A list of the high-priority stormwater issues the City will communicate to the public as a part of the public education and outreach program.
- The rationale for selection of each high-priority stormwater issue and an explanation of how each education or outreach strategy is intended to have a positive impact on stormwater discharges.
- Identification of the public audience to receive each high-priority stormwater message.
- The strategies from the permit used to communicate each high-priority stormwater message.
- The anticipated time periods the messages will be communicated or made available to the public.

Anticipated BMPs or Strategies

The following are the anticipated high-priority stormwater issues that will be communicated to the public as a part of the public education and outreach program. These issues will be reviewed every year and updated as necessary.

High Priority Stormwater Issue 1: Chesapeake Bay Nutrients

- *Selection Rationale & Positive Impact of Outreach:* The City of Harrisonburg is within the Chesapeake Bay, and educating audiences about this issue is a chance to show them the greater impact of their actions.

- *Public Audience:* Students at local schools, residents of Harrisonburg and the surrounding counties, subscribers to the Stormwater and Environmental Newsletters, followers of the Harrisonburg Public Works Facebook page and Instagram account.
- *Communication Strategies and Messaging Time Periods:*

Strategy 1: Traditional Written Materials

- Stormwater and Environmental Newsletters: Messaging through the newsletter will take place multiple times throughout the year.
- Harrisonburg Stormwater Facebook Page and Instagram account: Messaging through Facebook will take place multiple times per month throughout the year.

Strategy 2: Media Materials:

- Local News Media: Messaging will occur when there is an important stormwater project or program taking place within Harrisonburg.

Strategy 3: Speaking Engagements

- Local Schools and Colleges
- Community Groups
- HCAP Site Visits: The City partners with the Shenandoah Valley Soil and Water Conservation District (SVSWCD) to implement the Harrisonburg Conservation Assistance Program which includes speaking to landowners about stormwater issues during site visits.

High Priority Stormwater Issue 2: High Quality Receiving Waters

- *Selection Rationale & Positive Impact of Outreach:* Blacks Run flows through the City of Harrisonburg and is a tangible reminder of the importance of local water quality. Blacks Run violates the State’s water quality standards for fecal coliform and benthics. Educating residents and visitors to Harrisonburg about how their actions can impact Blacks Run has the potential to create positive change in the stream’s water quality.
- *Public Audience:* Students at local schools, residents of Harrisonburg, businesses adjacent to Blacks Run, subscribers to the Stormwater and Environmental Newsletters, followers of the Harrisonburg Public Works Facebook page and Instagram account.

- *Communication Strategies and Messaging Time Periods:*

Strategy 1: Traditional Written Materials

- Stormwater and Environmental Newsletters: Messaging through the newsletter will take place multiple times throughout the year.
- Harrisonburg Public Works Facebook Page: Messaging through Facebook will take place multiple times per month throughout the year.

Strategy 2: Media Materials:

- Local News Media: Messaging will occur when there is an important stormwater project or program taking place within Harrisonburg.

Strategy 3: Speaking Engagements

- Local Schools and Colleges
- Community Groups
- HCAP Site Visits: The City partners with the Shenandoah Valley Soil and Water Conservation District (SVSWCD) to implement the Harrisonburg Conservation Assistance Program which includes speaking to landowners about stormwater issues during site visits.

High Priority Stormwater Issue 3: Litter and Trash Control

- *Selection Rationale & Positive Impact of Outreach:* Many city departments coordinate trash clean-up activities, such as the Adopt-A-Street program, Blacks Run Clean Up Day, and cleanup of City streets and medians during mowing and storm drain cleaning operations. These efforts have historically been distinct programs run by different individuals to target the litter problem in Harrisonburg. However, all trash and litter on city streets winds up in the same place - the storm sewer system and local waterways. The MS4 Program will take the lead in coordinating internal trash cleanups and will additionally coordinate with the public to inform them about litter removal and why this links with local water quality. If necessary, Sec 7-6-5 of Harrisonburg City Code and Sec 6-2-6 of Harrisonburg City Code will be utilized in outreach efforts. A marketing campaign paired with the refuse and recycling program will heavily promote ‘reduce and reuse’ of waste items prior to recycling. This campaign may change behaviors and decrease the use of plastic items in the waste stream.
- *Communication Strategies and Messaging Time Periods:*
 - Strategy 1: Traditional Written Materials
 - Stormwater and Environmental Newsletters: Messaging through the newsletter will take place multiple times throughout the year.
 - Harrisonburg Public Works Facebook Page: Messaging through Facebook will take place multiple times per month throughout the year.
 - Strategy 2: Alternative Materials
 - Clean Up Supplies: Trash bags and trash grabbers will be provided throughout the year to Blacks Run Clean Up Day participants in April, and other groups as they volunteer for clean ups.
 - Promotional/Alternative Material: stormwater “SWAG” given out at events. This happens at various times throughout the year. Examples in the past have included water bottles, koozies, stickers, magnets, and reusable bags.

Standard Operating Procedures or Policies Necessary to Implement this BMP

Public Education and Outreach Plan, Appendix B.

The Measurable Goal by Which this BMP will be Evaluated

This BMP will be considered successful if the high-priority stormwater issues are communicated to the audiences identified in the Public Education and Outreach Plan.

Persons, Positions, or Departments Responsible for Implementing this BMP

- Public Works Department
 - Sustainability and Environmental Manager
 - Stormwater Compliance Specialist
 - Environmental Specialist
 - Business Services Manager
 - Outreach & Communication Specialist
 - Greenspace Manager
 - Landscape Supervisor
- City Manager's Office
 - Director of Communications

Annual Reporting Requirements

- A list of the high-priority stormwater issues the City addressed in the public education and outreach program.
- A list of public education and outreach activities and the strategies used to communicate each high-priority stormwater issue.
- Description of any changes needed to the Public Education and Outreach Plan

Documents Incorporated by Reference

- A list of the high-priority stormwater issues the City addressed in the public education and outreach program.
- A list of the strategies used to communicate each high-priority stormwater issue.

Minimum Control Measure #2: Public Involvement and Participation

BMP 2.1: Plan for, Respond to, and Document Public Input, Complaints and Reports

Description

The City will develop and implement procedures for the following:

- (1) The public to report potential illicit discharges, improper disposal, or spills to the MS4, complaints regarding land disturbing activities, or other potential stormwater pollution concerns;
- (2) The public to provide comments on the permittee's MS4 program plan;
- (3) Responding to public comments received on the MS4 program plan ; and
- (4) Maintaining documentation of public comments received on the MS4 program and associated MS4 program plan and the permittee's response. b. No later than three months after this permit's effective date, the permittee shall update and maintain the webpage dedicated to the MS4 program and stormwater pollution prevention. The following information shall be posted on this webpage

- The public to report potential illicit discharges, improper disposal, or spills to the MS4, complaints regarding land disturbing activities, or other potential stormwater pollution concerns.
- The public to provide input on the city’s MS4 Program Plan.
- Receiving public input or complaints.
- Responding to public input received on the MS4 Program Plan or complaints.
- Maintaining documentation of public input received on the MS4 program and associated MS4 Program Plan and the city’s response.

Specific Program Plan Requirements:

- (1) The webpage address where mechanisms for the public to report (i) potential illicit discharges, improper disposal, or spills to the MS4, (ii) complaints regarding land disturbing activities, or (iii) other potential stormwater pollution concerns;
- (2) The webpage address that contains the methods for how the public can provide input on the permittee’s MS4 program; and

Anticipated BMPs or Strategies

Standard operating procedures and policies necessary to implement this BMP are listed in Appendix A.

The following webpages have directions on how to submit comments, report pollution, ask questions, or voice complaints:

- <https://www.harrisonburgva.gov/MS4-permit-program>
- <https://www.harrisonburgva.gov/report-pollution>
- <https://www.harrisonburgva.gov/site-development>
- <https://harrisonburg-va.granicus.com/boards/w/f77330ac58fb903c/boards/40299>
(SWAC)

Standard Operating Procedures or Policies Necessary to Implement this BMP

Standard operating procedures and policies necessary to implement this BMP are listed in Appendix A.

The Measurable Goal by which this BMP will be evaluated

This BMP will be considered successful if the public is able to report concerns and provide input about the city’s stormwater program.

Persons, Positions, or Departments Responsible for Implementing this BMP

- Public Works Department
 - Sustainability and Environmental Manager
 - Stormwater Compliance Specialist
 - Environmental Specialist
 - Outreach & Communication Specialist
- Harrisonburg Fire Department
- Community Development Department
- Public Utilities Department

Annual Reporting Requirements

- (1) A summary of any public comments on the MS4 program received and how the permittee responded;
- (2) A summary of stormwater pollution complaints received under the procedures established in Part I E 2 a (1) (excluding flooding complaints) and how the permittee responded;
- (3) A webpage address to the permittee's MS4 program and stormwater website;
- (4) Federal and state nontraditional permittees with security policies preventing the MS4 program and stormwater pollution prevention webpage from being publicly accessible utilizing an internal staff accessible website such as intranet shall provide evidence of the current internal MS4 program and stormwater pollution prevention webpage.

Documents Incorporated by Reference

None.

BMP 2.2: Update and Maintain a Stormwater Webpage

Description

No later than three months after this permit's effective date, the permittee shall update and maintain the webpage dedicated to the MS4 program and stormwater pollution prevention. The following information shall be posted on this webpage:

- (1) The effective MS4 permit and coverage letter;
- (2) The most current MS4 program plan or location where the MS4 program plan can be obtained;
- (3) The annual report for each year of the term covered by this permit no later than 30 days after submittal to the department;
- (4) The most current Chesapeake Bay TMDL action plan or location where the Chesapeake Bay TMDL action plan can be obtained;
- (5) Chesapeake Bay TMDL implementation annual status reports for each year of the term covered by this permit no later than 30 days after submittal to the department and no later than 30 days after the implementation status report has been deemed technically complete by the department if revisions were made as a result of a technical review completed by the department;
- (6) A mechanism for the public to report potential illicit discharges, improper disposal, or spills to the MS4, complaints regarding land disturbing activities, or other potential stormwater pollution concerns in accordance with Part I E 2 a (1); and
- (7) Methods for how the public can provide comments on the permittee's MS4 program plan in accordance with Part I E 2 a (2) and if applicable, the Chesapeake Bay TMDL action plan in accordance with Part II A 13.

Program Plan Requirements

- (1) The webpage address where mechanisms for the public to report (i) potential illicit discharges, improper disposal, or spills to the MS4, (ii) complaints regarding land disturbing activities, or (iii) other potential stormwater pollution concerns;
- (2) The webpage address that contains the methods for how the public can provide input on the permittee's MS4 program; and

Anticipated BMPs or Strategies

- Mechanisms for the public to report stormwater pollution concerns can be found at: <http://www.harrisonburgva.gov/stormwater-management-program>
- Mechanisms for the public to provide input on the city’s MS4 program can be found at: <https://www.harrisonburgva.gov/MS4-permit-program>

Standard Operating Procedures or Policies Necessary to Implement this BMP

None

The Measurable Goal by which this BMP will be evaluated

This BMP will be considered successful if the stormwater webpage includes the information required in the MS4 permit.

Persons, Positions, or Departments Responsible for Implementing this BMP

- Public Works Department
 - Sustainability and Environmental Manager
 - Stormwater Compliance Specialist
 - Outreach & Communication Specialist
 - Program Support Specialist Sr.
- Information Technology Department
 - Webmaster

Annual Reporting Requirements

A webpage link to the city’s MS4 program and stormwater website.

Documents Incorporated by Reference

None.

BMP 2.3: Implement Four Public Involvement Opportunities

Description

Traditional permittees shall implement no less than four activities per year from two or more of the categories listed in Table 2 below to provide an opportunity for public involvement to improve water quality and support local restoration and clean-up projects.

Table 2 Public Involvement Opportunities	
Public involvement opportunities	Examples (provided as example and are not meant to be all inclusive or limiting)
Monitoring	Establish or support citizen monitoring group
Restoration	Stream, watershed, shoreline, beach, or park clean-up day, adopt-a-water way program, tree plantings, and riparian buffer plantings

Public Education Activities	Booth at community fair, demonstration of stormwater control projects, presentation of stormwater materials to schools to meet applicable education Standards of Learning or curriculum requirements, or watershed walks
Public Meetings	Public meetings on proposed community stormwater management retrofits, green infrastructure redevelopment, ecosystem restoration, TMDL development, voluntary residential low impact development, or other stormwater issues
Disposal or collection events	Household hazardous chemicals collection, vehicle fluids collection
Pollution prevention	Adopt-a-storm drain program, implement a storm drain marking program, promote use of residential stormwater BMPs, implement pet waste stations in public areas, adopt-a-street program.

Program Plan Requirements

- A description of the public involvement activities to be implemented by the permittee, the anticipated time period the activities will occur, and a metric for each activity to determine if the activity is beneficial to water quality. An example of metrics may include the weight of trash collected from a stream cleanup, the number of participants in a hazardous waste collection event, etc.

Anticipated BMPs or Strategies

- **Blacks Run Clean Up Day:** Blacks Run Clean Up Day is the annual community stream clean up organized by the City of Harrisonburg. It is anticipated the clean up will take place on the second Saturday in April of each year. Additional small group clean ups may be utilized throughout the year. The metric for determining if the activity is beneficial to water quality will be tonnage of trash picked up.
- **Household Hazardous Waste Collection Days:** Household Hazardous Waste Collection Days are organized by the City of Harrisonburg and Rockingham County and are offered to residents so they can properly dispose of their household hazardous waste. It is anticipated there will be two days scheduled per year – one in the spring and one in the fall. The metric for determining if the activity is beneficial to water quality will be the type and amounts of items dropped off during the collection days.
- **Middle School Watershed Field Trips:** City of Harrisonburg middle school students participate in hands-on watershed based field trips as a part of their curriculum. City of Harrisonburg staff help to teach lessons during these trips. It is anticipated that four field trip days will be held every year, in the fall and in the spring. The spring field trips days with Harrisonburg middle school students may be replaced with Rockingham County middle school students if HCPS decides to not hold their spring field trip days. In the event the field trips are cancelled, staff will conduct smaller hands-on group lessons along the stream with K-12 or college students. The

metric for determining if the activity is beneficial to water quality will be the number of students reached through staff taught lessons.

- **Rain Barrel Workshops:** Rain Barrel workshops are organized by the Shenandoah Valley Soil and Water Conservation District and the City of Harrisonburg. Participants are taught about water conservation and watershed health, and make rain barrels out of pickle barrels. It is anticipated that one rain barrel workshop will be held every year, in early spring. A second Rain Barrel Workshops may be planned for the fall pending enough participants signup to hold both events. The metric for determining if the activity is beneficial to water quality will be the number of participants in the workshop and the amount of rain barrels built.
- **Public Tree Planting Events:** Tree planting events where the public is invited to help plant trees are organized throughout the year. There are multiple small group volunteer tree planting events throughout the year. Typically, at least one larger group planting event is anticipated each year in the spring around Arbor Day.

Standard Operating Procedures or Policies Necessary to Implement this BMP

None

The Measurable Goal by which this BMP will be evaluated

This BMP will be considered successful if four or more activities as described by the MS4 permit are implemented during the permit year.

Persons, Positions, or Departments Responsible for Implementing this BMP

- Public Works Department
 - Sustainability and Environmental Manager
 - Stormwater Compliance Specialist
 - Environmental Specialist
 - Outreach & Communication Specialist
 - Greenspace Manager
 - Landscape Supervisor
- City Manager's Office
 - Director of Communications

Annual Reporting Requirements

1. (5) A description of the public involvement activities implemented by the permittee;
2. (6) A report of the metric as defined for each activity and an evaluation as to whether or not the activity is beneficial to improving water quality; and
3. (7) The name of other MS4 permittees with whom the permittee collaborated in the public involvement opportunities.

Annual Reporting Requirements

None

Minimum Control Measure #3: Illicit Discharge Detection and Elimination

BMP 3.1: Develop and Maintain a Storm Drain System, Outfalls, and Information Map

Description

The City will develop and maintain an accurate MS4 Outfall and TMDL maps and information table, which will be submitted to the DEQ no later than 12 months after permit effective date, and updated no later than October 1 of each year. If any physical interconnections to other MS4s are established or discovered, written notification will be provided to those MS4s.

Program Plan Requirements

- The MS4 map and information table. The map and information table may be incorporated into the MS4 Program Plan by reference. The map shall be made available to the department within 14 days upon request.
- Copies of written notifications of new physical interconnections given by the City to other MS4s

Anticipated BMPs or Strategies

- The City maintains an MS4 map and information table, the map will be made available to the department within 14 days upon request.
- Copies of written notifications of new physical interconnections are attached in Appendix C.

Standard Operating Procedures or Policies Necessary to Implement this BMP

None

The Measurable Goal by which this BMP will be Evaluated

This BMP will be considered successful if the MS4 map and information table are developed and submitted per the permit specifications.

Persons, Positions, or Departments Responsible for Implementing this BMP

- Public Works Department
 - Sustainability and Environmental Manager
 - Stormwater Compliance Specialist
 - Environmental Specialist
 - Asset Manager
 - Systems Analyst
 - GIS Intern(s)
- Community Development Department
 - GIS Technician
- Information Technology Department
 - GIS Coordinator
 - GIS Analyst

Annual Reporting Requirements

A confirmation statement that the MS4 map and information table are up-to-date as of June 30 of the reporting year.

Documents Incorporated by Reference

MS4 Map and Information Tables

BMP 3.2: Prohibit Illicit Discharges and Connections through Ordinance Language

Description

The permittee shall prohibit, through ordinance, policy, standard operating procedures, or other legal mechanism, to the extent allowable under federal, state, or local law, regulations, or ordinances, unauthorized nonstormwater discharges into the storm sewer system. Nonstormwater discharges or flows identified in 9VAC25-890-20 D 3 shall only be addressed if they are identified by the permittee as a significant contributor of pollutants discharging to the MS4. Flows that have been identified by the department as de minimis discharges are not significant sources of pollutants to surface water.

Program Plan Requirements

No requirements

Anticipated BMPs or Strategies

The ordinance can be found in City Code Title 7, Chapter 6 at: <http://www.harrisonburgva.gov/code>.

Standard Operating Procedures or Policies Necessary to Implement this BMP

Standard operating procedures and policies necessary to implement this BMP are listed in the Anticipated BMPS or Strategies section above.

The Measurable Goal by which this BMP will be Evaluated

This BMP will be considered successful if there are ordinances, policies, standard operating procedures, or other legal mechanisms that prohibit non-stormwater discharges into the storm sewer system.

Persons, Positions, or Departments Responsible for Implementing this BMP

- Public Works Department
 - Director of Public Works
 - Sustainability and Environmental Manager
 - Stormwater Compliance Specialist
- City Manager's Office
 - City Attorney
 - Assistant City Attorney

Annual Reporting Requirements

No requirements

Documents Incorporated by Reference

None.

BMP 3.3: Maintain and Implement Illicit Discharge Detection and Elimination Written Procedures

Description

The City will maintain and implement illicit discharge detection and elimination (IDDE) written procedures designed to detect, identify, and address unauthorized non-stormwater discharges, including illegal dumping, to the MS4 with the goal of eliminating the unauthorized discharge. Procedures will include dry weather field screening of at least 50 outfalls per year.

Program Plan Requirements

Procedures including:

- Illicit Discharge Investigation Procedures as described in Part I E 3 C
- Dry Weather Field Screening Methodologies as described in Part I E 3 C

Anticipated BMPs or Strategies

- See Appendix D for the IDDE Procedures. The Departments of Public Utilities and Fire Department have their own processes and procedures for managing sanitary sewer overflows and hazardous chemicals/ materials, respectively, and for reporting information to the VA DEQ. In the event that there is a discharge that enters the city's storm sewer system, Public Utilities and Fire Department will inform the Sustainability and Environmental Manager.
- See Appendix E for Dry Weather Field Screening Methodologies.

Standard Operating Procedures or Policies Necessary to Implement this BMP

Standard operating procedures and policies necessary to implement this BMP are listed in the Anticipated BMPS or Strategies section above.

The Measurable Goal by which this BMP will be Evaluated

This BMP will be considered successful if IDDE procedures are maintained and implemented, and 50 outfalls are inspected annually.

Persons, Positions, or Departments Responsible for Implementing this BMP:

- Public Works Department
 - Sustainability and Environmental Manager
 - Stormwater Compliance Specialist
 - Environmental Specialist
 - General Program Supervisor- Stormwater
 - Asset Manager
 - Systems Analyst
 - GIS Intern(s)
- Community Development Department
 - GIS Technician
- Information Technology Department
 - GIS Coordinator
 - GIS Analyst
- Public Utilities
 - Public Utilities Engineer
- Fire Department
 - Deputy Fire Marshall
 - Fire Inspector

Annual Reporting Requirements

- The total number of outfalls screened during the reporting period as part of the dry weather screening program.
- A list of illicit discharges to the MS4 including spills reaching the MS4.

- (a) The location and source of illicit discharge;
- (b) The dates that the discharge was observed, reported, or both;
- (c) Whether the discharge was discovered by the permittee during dry weather screening, reported by the public, or other method (describe);
- (d) How the investigation was resolved;
- (e) A description of any follow-up activities; and
- (f) The date the investigation was closed.

Documents Incorporated by Reference

- City Ordinance 7-6
- IDDE SOPs
- Outfall Screening SOP

Minimum Control Measure #4: Construction Site Stormwater Runoff Control

BMP 4.1: Use Legal Authority to Address Discharges Entering the MS4

Description

The City will utilize its legal authority, such as ordinances, permits, orders, specific contract language, and interjurisdictional agreements, to address discharges entering the MS4 from regulated construction site stormwater runoff. The City will control construction site stormwater runoff by implementing its Virginia Erosion and Sediment Control Program (VЕСP) consistent with the Virginia Erosion and Sediment Control Law (Sec. 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840).

Program Plan Requirements

- (1) If the permittee implements an erosion and sediment control program for construction site stormwater runoff in accordance with Part I E 4 a (1), the local ordinance citations for the VЕСP program;
- (3) If the permittee implements annual standards and specifications for erosion and sediment control and construction site stormwater runoff in accordance with Part I E 4 a (3):
 - (a) The most recently approved standards and specifications or if incorporated by reference, the location where the standards and specifications can be viewed; and
 - (b) A copy of the most recent standards and specifications approval letter from the department;
- (4) A description of the legal authorities utilized to ensure compliance with Part I E 4 a for erosion and sediment control and construction site stormwater runoff control such as ordinances, permits, orders, specific contract language, policies, and interjurisdictional agreements;
- (5) For traditional permittees, written inspection procedures to ensure VЕСP requirements are maintained in accordance with 9VAC25-840-90 A and onsite erosion and sediment controls are properly implemented in accordance with 9VAC25-840-60 B.
- (7) Traditional permittees shall maintain written procedures for requiring VЕСP compliance through corrective action or enforcement action in accordance with § 62.1-44.15:58 of the Code of Virginia.
- (9) The roles and responsibilities of each of the permittee's departments, divisions, or subdivisions in implementing erosion and sediment control and construction site stormwater runoff control requirements in Part I E 4.
- The local ordinance citations for the VЕСP program.

- A description of the legal authorities utilized to ensure compliance with Part I E 4 a to control construction site stormwater runoff control such as ordinances, permits, orders, specific contract language, policies, and interjurisdictional agreements.
- Written inspection procedures to ensure the erosion and sediment controls are properly implemented and all associated documents utilized during inspection including the inspection schedule
- Written procedures for requiring compliance through corrective action or enforcement action to the extend allowable under federal, state, or local law, regulation, ordinance, or other legal mechanisms

The roles and responsibilities of each of the city’s departments, divisions, or subdivisions in implementing the construction site stormwater runoff control requirements in Park I E 4.

Anticipated BMPs or Strategies

- Section 10-4 of the City Code describes the Erosion and Sediment Control Ordinance
- Legal Authorities include:
 - Section 10-4 of the City Code
 - City’s Subdivision and Zoning Ordinance
 - Design & Construction Standards Manual
 - References from above ordinances and documents to the “Virginia Erosion and Sediment Control Regulations” and the Virginia Erosion & Sediment Control Handbook
 - Additional information about the City’s erosion and sediment control program can be found at: <http://www.harrisonburgva.gov/site-development>. (Note: The City of Harrisonburg utilizes an agreement in lieu of a plan for the construction of single-family residences as provided in §62.1-44.15:55.) The City requires that land disturbance not begin until and erosion and sediment control plan or an agreement in lieu of a plan is approved by the City.
- Written procedures and all associated documents for:
 - Plan Review
 - Procedures for Site Plan Review: <http://www.harrisonburgva.gov/site-development>
 - Site Plan Review Checklist: <http://www.harrisonburgva.gov/dscsm> (Appendix B)
 - Design and Construction Standards Manual: <http://www.harrisonburgva.gov/dscsm> (Chapter 2)
 - City Code: Title 10; Chapter 4: Erosion and Sediment Control
 - Virginia Erosion and Sediment Control Law
 - State Water Control Board; Erosion and Sediment Control Regulations; Chapter 840
 - City Code Sections:
 - 10-4-5. Submission and approval of plans; contents of plans
 - 10-4-6. Permits; fees; security for performance
 - Inspections
 - City Code Section: 10-4-7. Monitoring, reports and inspections
 - Erosion & Sediment Control Report
 - Erosion & Sediment Control Site Checklist
 - ESC & Stormwater Final Inspection Checklist
 - VSMP Inspection Checklist
- For compliance procedures, see City Code Sections:

- 10-4-8. Penalties, injunctions, and other legal actions
- 10-4-9. Civil violations, summons, generally

Standard Operating Procedures or Policies Necessary to Implement this BMP

Standard operating procedures and policies necessary to implement this BMP are listed in the Anticipated BMPS or Strategies section above.

The Measurable Goal by which this BMP will be Evaluated

This BMP will be considered successful if the City controls construction site stormwater runoff through its Virginia Erosion and Sediment Control Program.

Persons, Positions, or Departments Responsible for Implementing this BMP

- Community Development Department
 - City Engineer (Erosion & Sediment Control Program Administrator)
 - Engineer (plan review)
 - Site Development Coordinator
- Public Works Department
 - Capital Projects Manager
 - Engineer
 - Engineer Trainee
 - Construction Program Supervisor
 - Senior Construction Program Inspector
 - Construction Program Inspector
 - City Inspector(s)

Annual Reporting Requirements

- A confirmation statement that land disturbing projects that occurred during the reporting period have been conducted in accordance with the current department approved standards and specifications for erosion and sediment.
- If one or more of the land disturbing projects were not conducted with the department approved standards and specifications, an explanation as to why the projects did not conform to the approved standards and specifications.
- Total number of inspections conducted.
- The total number and type of enforcement actions implemented and the type of enforcement actions.

Documents Incorporated by Reference

- Section 10-4 of the City Code
- City's Subdivision and Zoning Ordinance
- Design & Construction Standards Manual

Minimum Control Measure #5: Post-Construction Stormwater Management for New Development and Development on Prior Developed Lands

BMP 5.1: Implement the VSMP

Description

The city has an approved Virginia Stormwater Management Program (VSMP) and so shall implement the VSMP consistent with the Virginia Stormwater Management Act (Sec 62.1-44.15:24 et seq. of the Code of Virginia) and the VSMP Regulations (9VAC25-870).

Program Plan Requirements

- A copy of the VSMP approval letter issued by the department
- A description of the legal authorities utilized to ensure compliance with the permit requirements for post-construction stormwater runoff control such as ordinances, permits, orders, specific contract language, and interjurisdictional agreements.

Anticipated BMPs or Strategies

- A copy of the VSMP approval letter is attached in Appendix F.
- See documents listed in the Program Plan Response section for BMP 4.1.
- During construction, the Chief Construction Inspector and Construction Inspectors are responsible for inspecting stormwater management facilities that are being constructed on both privately-owned and city-owned properties. The Site Development Technician is responsible for tracking enforcement. After construction is completed, the City Engineer and Planning & Community Development Department staff (listed above) are responsible for ensuring that privately-owned stormwater management facilities are in good working order. The Stormwater Compliance Specialist and Environmental Specialist are responsible for ensuring that city-owned facilities are inspected and that the facilities are in good working order.

Standard Operating Procedures or Policies Necessary to Implement this BMP

Standard operating procedures and policies necessary to implement this BMP are listed in the Anticipated BMPs or Strategies section above.

The Measurable Goal by which this BMP will be Evaluated

This BMP will be considered successful if the VSMP is implemented with applicable state regulations.

Persons, Positions, or Departments Responsible for Implementing this BMP

- Community Development Department
 - City Engineer (VSMP Administrator)
 - Engineer
 - Site Development Coordinator
- Public Works Department
 - Sustainability and Environmental Manager
 - Stormwater Compliance Specialist
 - Environmental Specialist
 - General Program Supervisor- Stormwater

- The roles and responsibilities of each of the permittee’s departments, divisions, or subdivisions in implementing the post-construction stormwater runoff control program.

Annual Reporting Requirements

None

Documents Incorporated by Reference

- Section 10-4 of the City Code
- City’s Subdivision and Zoning Ordinance
- Design & Construction Standards Manual

BMP 5.2: Inspection and Maintenance Program for City Owned Stormwater Management Facilities

Description

The City will implement an inspection and maintenance program for those stormwater facilities owned or operated by the City that discharges to the MS4. The City will:

- Develop and maintain written inspection and maintenance procedures to ensure adequate long-term operation and maintenance of its stormwater management facilities.
- Inspect city owned or operated stormwater management facilities no less than once per year.
- Maintain a prioritized schedule of significant maintenance and repair projects.
- Conduct maintenance as necessary.

Program Plan Requirements

Written inspection procedures and all associated documents utilized during inspection of stormwater management facilities owned or operated by the City.

Anticipated BMPs or Strategies

Written inspection procedures for operations and maintenance activities are attached in Appendix G.

Standard Operating Procedures or Policies Necessary to Implement this BMP

Standard operating procedures and policies necessary to implement this BMP are listed in the Anticipated BMPS or Strategies section above.

The Measurable Goal by which this BMP will be evaluated

This BMP will be considered successful if:

- Written inspection and maintenance procedures for city-owned stormwater management facilities are developed and maintained.
- City owned or operated stormwater management facilities are inspected once per year.
- Maintenance is conducted as necessary.

Persons, Positions, or Departments Responsible for Implementing this BMP

- Public Works Department
 - Sustainability and Environmental Manager
 - Stormwater Compliance Specialist

- Environmental Specialist
- General Program Supervisor- Stormwater

Annual Reporting Requirements

- Total number of inspections conducted on stormwater management facilities owned or operated by the City.
- A description of the significant activities performed on the stormwater management facilities owned or operated by the City to ensure they continue to perform as designed. This does not include routine activities such as grass mowing or trash collection.
- The most up to date prioritized stormwater management facility significant maintenance and repair schedule maintained in accordance with Part I E 5 b (4)

Documents Incorporated by Reference

- None

BMP 5.3: Inspection and Maintenance Program for Privately Owned Stormwater Management Facilities

Description

The City will implement an inspection and maintenance program for privately owned stormwater facilities that includes:

- An inspection frequency of no less than once per five years.
- Adequate long-term operation and maintenance by the owner by requiring the owner to develop a recorded inspection schedule and maintenance agreement.
- Enforcement of maintenance as needed.
- (2) Utilize its legal authority for enforcement of the maintenance responsibilities in accordance with 9VAC25-870-112 if maintenance is neglected by the owner.
- (5) Within 24 months of permit issuance, traditional permittees that do not require a maintenance instrument for individual residential lots pursuant to 9VAC25-870-112 B shall develop a strategy for addressing maintenance of stormwater management facilities designed to treat stormwater runoff primarily from an individual residential lot on which they are located. Such a strategy may include periodic inspections, homeowner outreach and education, or other method targeted at promoting the long-term maintenance of such facilities. Such facilities shall not be subject to the requirement for an inspection to be conducted by the permittee.
- (6) A confirmation statement that the permittee electronically reported stormwater management facilities using the DEQ BMP Warehouse in accordance with Part III B 1 and 2; and
- (7) A confirmation statement that the permittee electronically reported stormwater management facilities inspected using BMP Warehouse in accordance with Part III B 5

Program Plan Requirements

- Written inspection procedures and all associated documents utilized in the inspection of privately owned stormwater management facilities
- Written procedures for compliance and enforcement of inspection and maintenance requirements for privately owned BMPs

Anticipated BMPs or Strategies

- Written procedures for inspection of privately owned stormwater management facilities are attached in Appendix H.
- Written procedures for compliance and enforcement of inspection and maintenance requirements for privately owned BMPs are attached in Appendix I.

Standard Operating Procedures or Policies Necessary to Implement this BMP

Standard operating procedures and policies necessary to implement this BMP are listed in the Anticipated BMPs or Strategies section above.

The Measurable Goal by which this BMP will be Evaluated

This BMP will be considered successful if privately owned BMPs are inspected once every five years and have a recorded inspection schedule and maintenance agreement.

Persons, Positions, or Departments Responsible for Implementing this BMP

- Community Development Department
 - City Engineer
 - Engineer
 - Site Development Coordinator

Annual Reporting Requirements

- The number of privately owned stormwater management facility inspections conducted.
- The number of enforcement actions initiated by the permittee to ensure long-term maintenance of privately owned stormwater management facilities including the type of enforcement action.
- a confirmation statement that the permittee submitted stormwater management facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which the permittee was required to obtain coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities in accordance with Part III B 1 or a statement that the permittee did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities;
- (6) A confirmation statement that the permittee electronically reported stormwater management facilities using the DEQ BMP Warehouse in accordance with Part III B 1 and 2; and
- (7) A confirmation statement that the permittee electronically reported stormwater management facilities inspected using BMP Warehouse in accordance with Part III B 5

Documents Incorporated by Reference

- Section 10-4 of the City Code

BMP 5.4: Track and Report Stormwater Management Facilities

Description

The City will maintain an electronic database or spreadsheet of all known city owned or city operated and privately owned stormwater management facilities that discharge into the MS4. The database shall also include all BMPs implemented by the city to meet the Chesapeake Bay TMDL load reduction required. The database will be updated when new stormwater management facilities are brought on-line or existing stormwater management facilities are discovered.

The City will use the DEQ Construction Stormwater Database to report stormwater management facilities installed to address the control of post-construction runoff from land disturbing activities for which the city is required to obtain a General VPDES Permit for Discharges of Stormwater from Construction Activities.

Historical BMPs will be reported using the DEQ Construction Stormwater Database, and new BMPs will be added to the DEQ BMP Warehouse on a yearly basis.

Program Plan Requirements

The stormwater management facility spreadsheet or database incorporated by reference and the location or link where the spreadsheet or database can be reviewed.

Anticipated BMPs or Strategies

The stormwater management facility database is housed as a Microsoft Access file and can be reviewed on request.

Standard Operating Procedures or Policies Necessary to Implement this BMP

None.

The Measurable Goal by which this BMP will be Evaluated

This BMP will be considered successful if all stormwater management facilities are reported using the correct method in a timely manner.

Persons, Positions, or Departments Responsible for Implementing this BMP

- Community Development Department
 - Site Development Coordinator
 - Engineer
 - City Engineer
 - GIS Technician
- Public Works Department
 - Stormwater Compliance Specialist
 - Sustainability and Environmental Manager
 - Environmental Specialist
 - Asset Manager
 - Systems Analyst

Annual Reporting Requirements

- A confirmation statement that the City submitted stormwater management facility information through the Virginia Construction Stormwater General Permit Database for those land disturbing activities for which the city was required to obtain coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities or a statement that the city did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities.
- A confirmation statement that the City electronically reported BMPs using the DEQ BMP Warehouse in accordance with the permit and the date on which the information was submitted.

Minimum Control Measure #6: Pollution Prevention and Good Housekeeping for Facilities Owned or Operated by the Permittee

BMP 6.1: Maintain and Implement Written Procedures for Pollution Prevention and Good Housekeeping

Description

The City shall maintain and implement written procedures for those activities at facilities owned or operated by the City;

(1) Road, street, sidewalk, and parking lot maintenance and cleaning;

(a) Within 24 months of permit issuance, permittees that apply anti-icing and deicing agents shall update and implement procedures in accordance with this subsection to include implementation of best management practices for anti-icing and deicing agent application, transport, and storage.

(b) Procedures developed in accordance with this subsection shall prohibit the application of any anti-icing or deicing agent containing urea or other forms of nitrogen or phosphorus;

(2) Renovation and significant exterior maintenance activities (e.g. painting, building power-washing, roof resealing, and HVAC coil cleaning) not covered under a separate VSMP construction general permit. The permittee shall develop and implement procedures no later than 36 months of permit issuance;

(3) Discharging water pumped from construction and maintenance activities;

(4) Temporary storage of landscaping materials;

(5) Maintenance of permittee owned or operated vehicles and equipment (i.e. prevent pollutant discharges from leaking permittee vehicles and equipment); (6) Application of materials, including pesticides, and herbicides shall not exceed manufacturer's recommendations; and

(6) Application of materials, including pesticides and herbicides shall not exceed manufacturer's recommendations; and

(7) Application of fertilizer shall not exceed maximum application rates established by applicable nutrient management plans. For areas not covered under nutrient management plans where fertilizer is applied, application rates shall not exceed manufacturer's recommendations.

- Prevent illicit discharges
- Ensure the proper disposal of waste materials, including landscape wastes;
- Prevent the discharge of wastewater or city vehicle washwater into the MS4 without authorization under a separate VPDES permit
- Require implementation of best management practices when discharging water pumped from utility construction and maintenance activities
- Minimize the pollutants in stormwater runoff from bulk storage areas (e.g. salt storage, topsoil stockpiles) using best management practices
- Prevent pollutant discharge into the MS4 from leaking municipal automobiles and
- Ensure the application of materials, including fertilizers and pesticides, is conducted in accordance with the manufacturers recommendations

Written pollution prevention and good housekeeping procedures shall be utilized as a part of the employee training program.

Program Plan Requirements

Written procedures for the operations and maintenance activities.

Anticipated BMPs or Strategies

Written procedures for operations and maintenance activities are attached in Appendix J.

Standard Operating Procedures or Policies Necessary to Implement this BMP

Standard operating procedures and policies necessary to implement this BMP are listed in the Anticipated BMPs or Strategies section above.

The Measurable Goal by which this BMP will be Evaluated

This BMP will be considered successful if written procedures for pollution prevention and good housekeeping are maintained and implemented by the City.

Persons, Positions, or Departments Responsible for Implementing this BMP

- Public Works Department
 - Sustainability and Environmental Manager
 - Stormwater Compliance Specialist
 - Environmental Specialist

Annual Reporting Requirements

A summary of any daily operational procedures developed or modified in accordance with the permit requirements during the reporting period.

Documents Incorporated by Reference

- Good Housekeeping SOPs

BMP 6.2: Pollution Prevention by Contractors

Description

The City will require through the use of contract language, training, standard operating procedures, etc., that contractors employed by the city and engaging in activities with the potential to discharge pollutants use appropriate control measures to minimize the discharge of pollutants to the MS4.

Program Plan Requirements

A summary of the mechanisms the permittee uses to ensure contractors working on behalf of the city implement the necessary good housekeeping and pollution prevention plans as appropriate.

Anticipated BMPs or Strategies

Language in the General Terms and Conditions for the City of Harrisonburg, VA states: "The contractor shall comply with all applicable federal, state and local laws, rules and regulations." This statement is included in all city contract documents and would include all stormwater-related ordinances. This language will be emphasized during stormwater training so internal staff understands that contractors are held to the same standards as municipal staff.

This BMP will be implemented in coordination with all city departments that manage contracted work and will be included as a part of training for appropriate city staff.

Standard Operating Procedures or Policies Necessary to Implement this BMP

Standard operating procedures and policies necessary to implement this BMP are listed in the Anticipated BMPS or Strategies section above.

The Measurable Goal by which this BMP will be Evaluated

This BMP will be considered successful if there is language, training, or standard operating procedures in place that require contractors employed by the City to use appropriate control measures to minimize the discharge of pollutants.

Persons, Positions, or Departments Responsible for Implementing this BMP

- Public Works Department
 - Sustainability and Environmental Manager
- Purchasing Department
 - Procurement Manager

Annual Reporting Requirements

None

Documents Incorporated by Reference

1. Good Housekeeping and Pollution Prevention contract language in City's General Terms and Conditions for all City contracts.

BMP 6.3: Stormwater Pollution Prevention Training Plan

Description

The City will develop a training plan in writing for applicable staff. The City will maintain documentation of each training event conducted for a minimum of three years after the training event.

Program Plan Requirements

The written Stormwater Pollution Prevention Training Plan as outlined by permit Part I E 6 d requirements.

Anticipated BMPS or Strategies

The Stormwater Pollution Prevention Training Plan is attached in Appendix K.

Standard Operating Procedures or Policies Necessary to Implement this BMP

Standard operating procedures and policies necessary to implement this BMP are listed in the Anticipated BMPS or Strategies section above.

The Measurable Goal by which this BMP will be Evaluated

This BMP will be considered successful if the Stormwater Pollution Prevention Training Plan is followed as best as possible.

Persons, Positions, or Departments Responsible for Implementing this BMP

- Public Works Department
 - Stormwater Compliance Specialist
 - Sustainability and Environmental Manager
- Human Resources Department
 - HR Generalist, Sr.

Annual Reporting Requirements

A list of the training events conducted in accordance with the permit requirements including the following information:

- The date of the training event.
- The number of employees who attended the training event or number of employees assigned and successfully complete the training on VectorSolutions (formerly Target Solutions).
- The objective of the training event.

Documents Incorporated by Reference

None

BMP 6.4: Stormwater Pollution Prevention Plans

Description

The permittee shall maintain and implement a site specific stormwater pollution prevention plan (SWPPP) for each high-priority facility as defined in 9VAC25-890-1 that does not have or require separate VPDES permit coverage, and which any of the following materials or activities occur and are expected to have exposure to stormwater resulting from rain, snow, snowmelt or runoff:

- (1) Areas where residuals from using, storing or cleaning machinery or equipment remain and are exposed to stormwater;
- (2) Materials or residuals on the ground or in stormwater inlets from spills or leaks;
- (3) Material handling equipment;
- (4) Materials or products that would be expected to be mobilized in stormwater runoff during loading or unloading or transporting activities (e.g., rock, salt, fill dirt);
- (5) Materials or products stored outdoors (except final products intended for outside use where exposure to stormwater does not result in the discharge of pollutants);
- (6) Materials or products that would be expected to be mobilized in stormwater runoff contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers;
- (7) Waste material except waste in covered, nonleaking containers (e.g., dumpsters);
- (8) Application or disposal of process wastewater (unless otherwise permitted); or
- (9) Particulate matter or visible deposits of residuals from roof stacks, vents or both not otherwise regulated (i.e., under an air quality control permit) and evident in the stormwater runoff.

Identify High-Priority, High-Potential Sites and Implement Stormwater Pollution Prevention Plans - The City will maintain and implement a site pollution prevention plan for each high-priority facility owned or operated by the permittee with a high potential to discharge pollutants that are not covered under a separate VPDES permit. SWPPP facilities will be inspected. Facilities without SWPPPs will be reviewed annually and added as necessary.

SWPPP Development for High-Priority, High-Potential Sites - Each SWPPP will contain information about the site and potential pollutants, written procedures designed to reduce and prevent pollutant discharge, procedures for training, an inspection and maintenance schedule, an inspection log, a log of unauthorized discharges, releases or spills.

Non-SWPPP Site Review - No later than June 30 of each year, the City will review any high-priority facility owned or operated by the City for which a SWPPP has not been developed to determine if the facility has a high potential to discharge pollutants. If the facility is determined to be a high-priority facility with a high potential to discharge pollutants, the City will develop a SWPPP no later than December 31 of that same year.

SWPPP Site Review - The City will review the contents of any site specific SWPPP no later than 30 days after any unauthorized discharge, release, or spill is reported to determine if additional measures are necessary to prevent future unauthorized discharges, releases, or spills. If necessary, the SWPPP will be updated no later than 90 days after the unauthorized discharge.

SWPPP Documentation - The SWPPP shall be kept at the high-priority facility with a high potential to discharge and utilized as part of staff training. The SWPPP and associated documents may be maintained as a hard copy or electronically if the documents are available to employees at the applicable site.

Facility Removal - If activities change at a facility such that the facility no longer meets the criteria of a high-priority facility with a high potential to discharge pollutants, the City may remove the facility from the high-priority, high-potential list.

Program Plan Requirements

- A list of all high priority facilities owned or operated by the permittee and if the facility has a high potential to discharge.

Anticipated BMPs or Strategies

Stormwater Pollution Prevention Plans for each High-Priority, High-Potential facility.

Municipal Low Priority Facilities:

- A Dream Come True Playground
- Bluestone Elementary
- City County Court & Jail Complex
- HEC Sub Station- E Elizabeth
- HEC Sub Station- E Market
- HEC Sub Station- Maryland Ave
- HEC Sub Station- Mt Clinton Pike
- HEC Sub Station- Pleasant Valley Rd
- HEC Sub Station- Ramblewood Rd
- HEC Sub Station- Reservoir St
- HEC Sub Station- Smithland
- HEC Sub Station- W Market St
- Hillandale Park
- Keister Elementary
- Lucy Simms
- Morrison Park
- Purcell Park
- Ralph Sampson Park
- Rocktown Trails
- Skyline Middle/Smithland Elementary/
Elon Rhodes
- Spotswood Elementary
- Stone Spring Elementary
- Thomas Harrison Middle School
- Waterman Elementary
- Ramblewood Stockpiles
- Water Treatment Plant

Municipal High Priority Facilities:

- Heritage Oaks Golf Course, 680 Garbers Church Road
- Heritage Oaks Maintenance, 680 Garbers Church Road
- City School Maintenance 680 Garbers Church Road
- Ramblewood Conservation Area/Greendale Training Grounds, 868 North Liberty Street
- Central Stores Warehouse, 2111 Beery Road
- Ramblewood Stockpiles, 2311 Ramblewood Road

- Westover Park/CAC, 305 S Dogwood Dr
- Transit Facility, 474 East Washington Street

Municipal High Priority Facilities with a High Potential to Discharge

- HEC Facility (Sullivan Tract), 868 N Liberty St
- Parks and Recreation Facility (Park View Shops), 901 Chicago Avenue
- Public Utilities Facility, 2155 Beery Road
- Public Works Facility (includes West Market St Transfer Facility), 320 East Mosby Road
- Ramblewood Athletic Complex, 2129 Ramblewood Rd
- Recycling Convenience Center, 2055 Beery Road
- Fire Station 1-Maryland Ave, 80 Maryland Ave
- Fire Department Training Center, 320 East Mosby Road
- Fire Station 2-380, Pleasant Valley Road
- Fire Station 3-Lucy Drive, 299 Lucy Drive
- Fire Station 4-Rock St, 210 East Rock Street
- Harrisonburg High School, 1001 Garbers Church Rd
- Smithland Park (Soil Stockpiles)
- Public Works Greenhouse

Standard Operating Procedures or Policies Necessary to Implement this BMP

Stormwater Pollution Prevention Plans for each High-Priority, High-Potential facility are necessary to implement this BMP. These plans are available by request.

The Measurable Goal by which this BMP will be Evaluated

This BMP will be considered successful if high-priority, high-potential sites have Stormwater Pollution Prevention Plans and the review and documentation requirements listed in the permit are met.

Persons, Positions, or Departments Responsible for Implementing this BMP

- Public Works Department
 - Sustainability and Environmental Manager
 - Stormwater Compliance Specialist
 - Environmental Specialist
 - General Program Supervisor- Stormwater
- Other City Departments
 - Facility SWPPP Supervisor identified on SWPPP map

Annual Reporting Requirements

- A summary of any new SWPPPs developed in accordance with the permit requirements during the reporting period
- A summary of any SWPPPs modified in accordance with the permit requirements during the reporting period.
- A confirmation statement that all high-priority facilities were reviewed to determine if SWPPP coverage is needed during the reporting period
- The rationale of any high-priority facilities delisted in accordance with Part I E 6 l or m during the reporting period

Documents Incorporated by Reference

- SWPPP maps and Good Housekeeping SOPs

BMP 6.5: Turf and Landscape Nutrient Management Plans

Description

The City will maintain and implement turf and landscape nutrient management plans developed by a certified nutrient management planner on all lands owned or operated by the City where nutrients are applied to a contiguous area greater than one acre.

Nutrient management plans that are expired as of the effective date of this permit shall be submitted to DCR for renewal no later than six months after the effective date of this permit. Thereafter, all nutrient management plans shall be submitted to DCR at least 30 days prior to nutrient management plan expiration. Within 36 months of permit coverage, no nutrient management plans maintained by the permittee in accordance with Part I E 6 n shall be expired due to DCR documented noncompliance with 4VAC50-85-130 provided to the permittee.

Program Plan Requirements

A list of locations for which turf and landscape nutrient management plans are required in accordance with Part I E 6 n and s, including the following information:

- (a) The total acreage covered by each nutrient management plan
- (b) The DCR approval date and expiration date for each nutrient management plan; and
- (c) The location of the nutrient management plan hardcopy or electronic document being maintained

Anticipated BMPs or Strategies

Turf and landscape nutrient management plans are required for the following lands:

Facility Name	Lat/Long	Acreage	Approval Date	Expiration Date	Location of Plan
Heritage Oaks Golf Course	38°26'49.97"N, 78°54'15.82"W	66.42 acres	11/1/2022	11/1/2027	"U:\Stormwater\Pollution Prevention - Good Housekeeping\Nutrient Management Plans\Nutrient Management Plans"
Smithland Park	38°26'55"N, 78°50'02"W	5 acres, 2.5 acres, 10 acres	5/25/2023	5/25/2026	"U:\Stormwater\Pollution Prevention - Good Housekeeping\Nutrient Management Plans\Nutrient Management Plans"
Purcell Park	38°25'33"N, 78°52'53"W	1 acre, 5.0 acres	5/25/2023	5/25/2026	"U:\Stormwater\Pollution Prevention - Good Housekeeping\Nutrient Management Plans\Nutrient Management Plans"

Ramblewood Fields	38°24'44"N, 78°53'13"W	3.6 acres	5/25/2023	5/25/2026	"U:\Stormwater\Pollution Prevention - Good Housekeeping\nutrient Management Plans\nutrient Management Plans"
Harrisonburg High School	38°26'30"N, 78°54'37"W	11.14 acres	9/26/2023	9/23/2026	"U:\Stormwater\Pollution Prevention - Good Housekeeping\nutrient Management Plans\nutrient Management Plans"

Standard Operating Procedures or Policies Necessary to Implement this BMP

Standard operating procedure will be to implement turf and landscape management plans on all lands owned or operated by the city where nutrients are applied to a contiguous area greater than one acre.

The Measurable Goal by which this BMP will be Evaluated

This BMP will be considered successful if all lands owned or operated by the City where nutrients are applied to a contiguous area greater than one acre have nutrient management plans.

Persons, Positions, or Departments Responsible for Implementing this BMP

- Public Works Department
 - Sustainability and Environmental Manager
 - Stormwater Compliance Specialist
- Parks and Recreation Department
 - Director of Parks and Recreation
 - Athletic Turf Manager
- Harrisonburg City Public Schools
 - Coordinator of Operations
 - Chief Operating Officer
 - Executive Director of Special Projects and School Safety
 - Harrisonburg High School Athletics Director

Annual Reporting Requirements

The status of each nutrient management plan as of June 30 of the reporting year (e.g. approved, submitted and pending approval, and expired)

Documents Incorporated by Reference

- NMPs for facilities listed above

TMDL Special Conditions

Chesapeake Bay TMDL Special Condition

Description

The previous permit cycles (2013-2018, 2018-2023) achieved a minimum reduction of at least 40% as specified in the 2010 Phase II WIPs. This permit (2023-2028) requires implementation of an additional 60% pollutant reductions as specified in the 2010 Phase I and II WIPs. In combination with the 40% pollutant reductions that have already been achieved, the total reduction at the end of this permit term is 100%.

The City developed the draft Chesapeake Bay TMDL Action Plan which was submitted to the Virginia Department of Environmental Quality with the Registration Statement.

The City will implement its Chesapeake Bay TMDL Action Plan and submit progress reports in its MS4 Annual Report in accordance with the permit requirements. Any updates to the Chesapeake Bay TMDL Action Plan will be submitted with each MS4 Annual Report.

Program Plan Requirements

No later than 12 months after the permit effective date, the permittee shall submit a Phase III Chesapeake Bay TMDL action plan that includes the following information

- (1) Any new or modified legal authorities, such as ordinances, permits, policy, specific contract language, orders, and interjurisdictional agreements, implemented or needing to be implemented to meet the requirements of Part II A 3, A 4, and A 5.
- (2) The load and cumulative reduction calculations for each river basin calculated in accordance with Part II A 3, A 4, and A 5.
- (3) The total reductions achieved as of November 1, 2023, for each pollutant of concern in each river basin.
- (4) A list of BMPs implemented prior to November 1, 2023, to achieve reductions associated with the Chesapeake Bay TMDL including:
 - (a) The date of implementation; and
 - (b) The reductions achieved.
- (5) The BMPs to be implemented by the permittee within 60 months of the effective date of this permit to meet the cumulative reductions calculated in Part II A 3, A 4, and A 5, including as applicable:
 - (a) Type of BMP;
 - (b) Project name;
 - (c) Location;
 - (d) Percent removal efficiency for each pollutant of concern; and
 - (e) Calculation of the reduction expected to be achieved by the BMP calculated and reported in accordance with the methodologies established in Part II A 9 for each pollutant of concern; and
- (6) A summary of any comments received as a result of public participation, the permittee's response, and any revisions made to the action plan.

Anticipated BMPs or Strategies

The Chesapeake Bay TMDL Action Plan is available at: <https://www.harrisonburgva.gov/MS4-permit-program>

Annual Reporting Requirements

Once the Chesapeake Bay TMDL Action Plan is developed, each subsequent annual report shall include:

- A list of BMPs (not including annual practices) implemented during the reporting period and the estimated reduction of pollutants of concern achieved by each and reported in pounds per year;
- A list of annual practices implemented during the reporting period and the estimated reduction of pollutants of concern achieved by each and reported in pounds per year;
- If the permittee acquired credits during the reporting period to meet all or a portion of the required reductions, a statement that credits were required,
- The progress, using the final design efficiency of the BMPs, toward meeting the required cumulative reductions for total nitrogen, total phosphorous, and total suspended solids; and,
- A list of BMPs that are planned to be implemented during the next reporting period.

Documents Incorporated by Reference

The Chesapeake Bay TMDL Action Plan will be incorporated by reference into the program plan.

Local TMDL Special Conditions

Description

The City will develop and maintain a local TMDL action plan designed to reduce loadings for pollutants of concern if the permittee discharges the pollutants of concern to an impaired water for which a TMDL has been approved by the U.S. Environmental Protection Agency (EPA) as described below:

- For TMDLS approved by the EPA prior to July 1, 2018, and in which an individual or aggregate wasteload has been allocated to the permittee, the permittee shall update the previously approved local TMDL action plans to meet the conditions of the new permit as applicable, no later than 18 months after the permit effective date and continue implementation of the action plan; and
- For TMDLs approved by EPA on or after July 1, 2018, and prior to October 31, 2023, and in which an individual or aggregate wasteload has been allocated to the permittee, the permittee shall develop and initiate implementation of action plans to meet the conditions of Part II B 4, B 5, B 6, B 7, and B 8 as applicable no later than 30 months after the permit effective date.

Program Plan Requirements

a. The TMDL project name;

b. The EPA approval date of the TMDL;

c. The wasteload allocated to the permittee (individually or in aggregate), and the corresponding percent reduction, if applicable;

d. Identification of the significant sources of the pollutants of concern discharging to the permittee's MS4 and that are not covered under a separate VPDES permit. For the purposes of this requirement, a significant source of pollutants means a discharge where the expected pollutant loading is greater than the average pollutant loading for the land use identified in the TMDL;

- e. The BMPs designed to reduce the pollutants of concern in accordance with Parts II B 5, 6, 7, and 8;
- f. Any calculations required in accordance with Part II B 5, 6,7, or 8;
- g. For action plans developed in accordance with Part II B 5,6, and 8 an outreach strategy to enhance the public's education (including employees) on methods to eliminate and reduce discharges of the pollutants; and
- h. A schedule of anticipated actions planned for implementation during this permit term.

Anticipated BMPs or Strategies

The Smith Creek TMDL was completed in 2004 (implementation plan completed in 2009) and specifies a 95% reduction in E. coli and 22% reduction in sediment through a waste load allocation to the city. The Smith Creek TMDL Action plan may be found at:

The Blacks Run and Cooks Creek Watershed TMDL was revised on July 10, 2019 to include a WLA. A TMDL Action Plan will be developed for this permit cycle.

The following outlines the watersheds with TMDLs and the dates the TMDLs were approved. As of June 30, 2018, there were no wasteloads allocated to the city in these TMDLs:

1. North River-Mill Creek TMDL (2004)
2. Linville Creek TMDL (2004)
3. Cub Run TMDL (2004)

Annual Reporting Requirements

For each reporting period, each annual report shall include a summary of actions conducted to implement each local TMDL action plan.

Document Incorporated by Reference

- Smith Creek TMDL Action Plan

Appendix A: Public Input Reporting and Standard Operating Procedures

Reporting Procedures

The Harrisonburg City website outlines procedures for the public to report illicit discharges, improper disposal, or spills to the Ms4, complains regarding land disturbing activities, or other pollution concerns. This information can be found at: <https://www.harrisonburgva.gov/report-pollution> and is also summarized below:

To Report...	Call...	At...
A large spill or emergency situation	Harrisonburg Fire Department or Police:	9-1-1
Water pollution, illicit discharges and illicit connections	Harrisonburg Public Works:	540-434-5928, fill out the online form , or email report-pollution@harrisonburgva.gov
Construction issues, and erosion and sediment control problems	Harrisonburg Planning & Community Development Department:	540-432-7700
Leaking sanitary sewer lines, manholes, and other sanitary sewer issues	Harrisonburg Public Utilities (Water/Sewer):	540-434-9959
Trash and Solid Waste issues	Harrisonburg Public Works:	540-434-5928
Unsure who to call?	Police Department's non-emergency number:	540-434-4436

Input Procedures

The public can provide input on the permittee's MS4 program by calling Public Works at (540) 434-5928, emailing stormwater@harrisonburgva.gov or mailing comments to Harrisonburg Public Works Department, 320 East Mosby Road, Harrisonburg VA 22801. The public can also visit the Public Works office to speak with someone in person. Comments received at City Hall will be sent to Public Works via internal mail. Input related to a city issue that requires maintenance, such as street sweeping or clogged storm drains will be added to the Cityworks system.

Responding to Public Input or Complaints

Staff will respond to public input or complaints in a professional manner. Staff will follow up on concerns as soon as possible and coordinate with other departments as necessary to ensure the public receives an appropriate answer.

Documentation

Staff will maintain documentation of public input received and the city's response. Public input received as part of updating an Action Plan or Program Plan will be documented in the Action Plan/Program Plan along with the city's response.

Appendix B: Public Education and Outreach Plan

Chesapeake Bay High Priority Issues Outreach Plan

Last updated: 3/14/2024

High Priority Stormwater Issue 1: Chesapeake Bay Nutrients

- *Selection Rationale & Positive Impact of Outreach:* The City of Harrisonburg is within the Chesapeake Bay, and educating audiences about this issue is a chance to show them the greater impact of their local actions can have on the region and to remind them that all of our water eventually ends up at the Bay.
- *Public Audience:* Students at local schools, residents of Harrisonburg and the surrounding counties, subscribers to the Stormwater and Environmental Newsletters, followers of the Harrisonburg Public Works Facebook page.

Communication Strategies and Messaging Time Periods:

Strategy 1: Traditional Written Materials

- **Stormwater and Environmental Newsletters:** This email newsletter has a subscription list of around 700 contacts. Newsletters are typically sent out monthly on various stormwater topics.
- **Harrisonburg Public Works Facebook Page:** The Harrisonburg Public Works Facebook Page promotes high-quality receiving waters, education about the Chesapeake Bay and local TMDLs, and information about local events and projects. Facebook posts generally take place multiple times per month on various topics.

Strategy 2: Media Materials

2. **Local News Media:** Includes TV, radio, print, and digital news organizations as well as City Press Releases. Messaging will occur when there is an important stormwater project or program taking place within Harrisonburg.

Strategy 3: Speaking Engagements

- All speaking engagements attended by stormwater staff are focused on explaining water quality, including TMDLs, as well as Harrisonburg's role in meeting the Chesapeake Bay TMDL. These speaking engagements do not include Blacks Run Clean Up Day, Middle School Watershed Field Trips, or the annual rain barrel workshop as these events are counted as Public Involvement Activities.
- **HCAP Site Visits-** The Shenandoah Valley Soil & Water Conservation District administers the HCAP program for the City. Site visits include talking to landowners about stormwater pollution, the Chesapeake Bay, and ways landowners can reduce runoff from their property.

High Priority Stormwater Issue 2: High Quality Receiving Waters

- *Selection Rationale & Positive Impact of Outreach:* Blacks Run flows through the City of Harrisonburg and is a tangible reminder of the importance of local water quality. Blacks Run violates the State's water quality standards for fecal coliform and benthics. Educating residents and visitors to Harrisonburg about how their actions can impact Blacks Run has the potential to create positive change in the stream's water quality.

- *Public Audience:* Students at local schools, residents of Harrisonburg, businesses adjacent to Blacks Run, subscribers to the Stormwater and Environmental Newsletters, followers of the Harrisonburg Public Works Facebook Page.

Communication Strategies and Messaging Time Periods:

Strategy 1: Traditional Written Materials

1. Stormwater and Environmental Newsletters: This email newsletter has a subscription list of around 700 contacts. Newsletters are typically sent out monthly on various stormwater topics.
- Harrisonburg Public Works Facebook Page: The Harrisonburg Public Works Facebook Page promotes high-quality receiving waters, education about the Chesapeake Bay and local TMDLs, and information about local events and projects. Facebook posts generally take place multiple times per month on various topics.

Strategy 2: Media Materials

1. Local News Media: Includes TV, radio, print, and digital news organizations as well as City Press Releases. Messaging will occur when there is an important stormwater project or program taking place within Harrisonburg.

High Priority Stormwater Issue 3: Litter and Trash

- *Selection Rationale & Positive Impact of Outreach:* Many city departments coordinate trash clean-up activities, such as the Adopt-A-Street program, Blacks Run Clean Up Day, and cleanup of City streets and medians during mowing and storm drain cleaning operations. These efforts have historically been distinct programs run by different individuals to target the litter problem in Harrisonburg. However, all trash and litter on city streets winds up in the same place - the storm sewer system and local waterways. The MS4 Program will take the lead in coordinating internal trash cleanups and will additionally coordinate with the public to inform them about litter removal and why this links with local water quality. If necessary, Sec 7-6-5 of Harrisonburg City Code and Sec 6-2-6 of Harrisonburg City Code will be utilized in outreach efforts. A marketing campaign paired with the refuse and recycling program will heavily promote ‘reduce and reuse’ of waste items prior to recycling. This campaign may change behaviors and decrease the use of plastic items in the waste stream. Messages related to “zero-waste” movements may be included to encourage interested residents to reduce waste that can potentially end up in our local waterways.

Communication Strategies and Messaging Time Periods:

Strategy 1: Traditional Written Materials

2. Stormwater and Environmental Newsletters: This email newsletter has a subscription list of around 700 contacts. Newsletters are typically sent out monthly on various stormwater topics.
- Harrisonburg Public Works Facebook Page: The Harrisonburg Public Works Facebook Page promotes high-quality receiving waters, education about the Chesapeake Bay and local TMDLs, and information about local events and projects. Facebook posts generally take place multiple times per month on various topics.

Strategy 2: Media Materials

2. Local News Media: Includes TV, radio, print, and digital news organizations as well as City Press Releases. Messaging will occur when there is an important stormwater project or program taking place within Harrisonburg.

Strategy 3: Alternative Materials

2. Clean Up Supplies: In addition to Blacks Run Clean Up Day, several smaller clean ups are organized throughout the year with community groups, university students, and local businesses. Trash bags and trash grabbers were provided for these events. Stormwater staff typically talk about the importance of clean ups in relation to water quality as well as the Chesapeake Bay and local TMDLs.
3. Water Bottles: Re-usable water bottles are given out to Blacks Run Clean Up Day participants. These bottles have the Blacks Run Clean Up Day logo on them.
4. Optional Items: Other educational items such as stickers, magnets, or t-shirts may be used in addition to or as a substitute for the Water Bottles.

Priority Audiences

City Schools

- *Selection Rationale & Positive Impact of Outreach:* Most students in the City of Harrisonburg school system are also residents of the City of Harrisonburg. For this reason, students provide a positive avenue to educating families in the area about stormwater management and pollution prevention. It is also an opportunity to educate young people about environmental pollution and the impact the individual has on overall health of the environment.
- *Public Audience:* Students at Skyline Middle School and Thomas Harrison Middle School.
- *Communication Strategies:* Programs are in place that pair stormwater/watershed health education with STEM programs and the Trout in the Classroom program. Two field trips called Drink, Flush, Play and Plant-A-Seed includes all 7th graders the City school system. Relevant educational posters will be posted in the schools and other lessons led by City staff will be conducted where possible.
- *Messaging Time Periods:* Educational field trips take place in the spring and fall. Additional lessons will take place intermittently throughout the year.

Downtown Restaurants

- *Selection Rationale & Positive Impact of Outreach:* Due to the high number of restaurants located in our Downtown Historic District and their close proximity to Blacks Run, this issue was chosen as high-priority. Our focus is centered on clean-up activities (cleaning of hood vents, grease traps, bar mats, etc.), proper disposal of waste and recycling, and proper disposal of wash water.
- *Public Audience:* 30 restaurants located in the Downtown Historic District
- *Communication Strategies:* A presentation to the Downtown Dining Alliance regarding stormwater pollution prevention techniques will take place and distribution of laminated

informational posters to be posted in restaurant kitchen space will be mandatory for kitchen spaces. Harrisonburg Fire Marshals will ensure posters are present during their regularly scheduled inspections. A refuse and recycling survey will help gauge business owners preferred model moving forward with refuse and recycling. Recycling and pollution prevention will be linked by encouraging recycling is emptied, rinsed, cleaned, and kept indoors or undercover to prevent cross-contamination and trash juice. Additionally, flyers about FOGs will be developed and distributed

- *Messaging Time Periods:* The presentation to the Downtown Dining Alliance is planned to take place in the summer of 2018. Hard copy educational materials (refreshers from past years) will be provided at this time to be posted in kitchen spaces year -round. Digital copies of education materials will be disseminated after the meeting. Harrisonburg Downtown Renaissance and the Public Works Sanitation team will assist with survey and education about refuse and recycling. Flyers about FOGs will be developed in the 2018-2023 permit cycle.

Local TMDL

Pollutant of Concern 1: Nutrients

Strategy 1: Traditional Written Materials

- **Stormwater and Environmental Newsletters:** This email newsletter has a subscription list of around 700 contacts. Newsletters are typically sent out monthly on various stormwater topics.
- **Harrisonburg Public Works Facebook Page:** The Harrisonburg Public Works Facebook Page promotes high-quality receiving waters, education about the Chesapeake Bay and local TMDLs, and information about local events and projects. Facebook posts generally take place multiple times per month on various topics, including leaf collection, preventing trash juice, reducing fertilizer use, and keeping lawn clippings out of storm drains.

Strategy 2: Media Materials

3. **Local News Media:** Includes TV, radio, print, and digital news organizations as well as City Press Releases. Messaging will occur when there is an important stormwater project or program taking place within Harrisonburg.

Strategy 3: Speaking Engagements

- All speaking engagements attended by stormwater staff are focused on explaining water quality, including TMDLs, as well as Harrisonburg's role in meeting Local and Chesapeake Bay TMDLs. These speaking engagements do not include Blacks Run Clean Up Day, Middle School Watershed Field Trips, or the annual rain barrel workshop as these events are counted as Public Involvement Activities.
- **HCAP Site Visits-** The Shenandoah Valley Soil & Water Conservation District administers the HCAP program for the City. Site visits include talking to landowners about stormwater pollution, the Chesapeake Bay, nutrients, and ways landowners can reduce runoff from their property.

Strategy 4: Workshops/City Programs

- As part of advertising City programs aimed at installing or promoting stormwater BMP installation, City staff communicate the reasons why nutrients are an issue in local water quality as well as ways for landowners to reduce impacts from their property.

Strategy 5: Staff Training

- As part of the Good Housekeeping / Illicit Discharge training, city staff are trained bi-annually on stormwater issues. In addition to the requirements identified in Part I E 6 m, this training also includes information about Harrisonburg's watersheds and water quality impairments, and TMDLs. The training is given to staff through an online training platform called VectorSolutions (formerly TargetSolutions).

Pollutant of Concern 2: Sediment

Strategy 1: Traditional Written Materials

- Stormwater and Environmental Newsletters: This email newsletter has a subscription list of around 600 contacts. Newsletters are typically sent out monthly on various stormwater topics.
- Harrisonburg Public Works Facebook Page: The Harrisonburg Public Works Facebook Page promotes high-quality receiving waters, education about the Chesapeake Bay and local TMDLs, and information about local events and projects. Facebook posts generally take place multiple times per month on various topics, including keeping a healthy stand of vegetation, minimizing soil disturbance, the importance of stream bank restoration and buffers, and enrolling in one of our programs to address erosion issues.

Strategy 2: Media Materials

4. Local News Media: Includes TV, radio, print, and digital news organizations as well as City Press Releases. Messaging will occur when there is an important stormwater project or program taking place within Harrisonburg.

Strategy 3: Speaking Engagements

- All speaking engagements attended by stormwater staff are focused on explaining water quality, including TMDLs, as well as Harrisonburg's role in meeting the Chesapeake Bay TMDL. These speaking engagements do not include Blacks Run Clean Up Day, Middle School Watershed Field Trips, or the annual rain barrel workshop as these events are counted as Public Involvement Activities.
- HCAP Site Visits- The Shenandoah Valley Soil & Water Conservation District administers the HCAP program for the City. Site visits include talking to landowners about stormwater pollution, the Chesapeake Bay, sediments, and ways landowners can reduce runoff from their property.

Strategy 4: Workshops/City Programs

- As part of advertising City programs aimed at installing or promoting stormwater BMP installation, City staff communicate the reasons why sediment are an issue in local water quality as well as ways for landowners to reduce impacts from their property.

Strategy 5: Staff Training

- As part of the Good Housekeeping / Illicit Discharge training, city staff are trained bi-annually on stormwater issues. In addition to the requirements identified in Part I E 6 m, this training also includes information about Harrisonburg's watersheds and water quality impairments, and TMDLs. The training is given to staff through an online training platform called VectorSolutions (formerly TargetSolutions).

Pollutant of Concern 3: Bacteria

Strategy 1: Traditional Written Materials

- **Stormwater and Environmental Newsletters:** This email newsletter has a subscription list of around 600 contacts. Newsletters are typically sent out monthly on various stormwater topics.
- **Harrisonburg Public Works Facebook Page:** The Harrisonburg Public Works Facebook Page promotes high-quality receiving waters, education about the Chesapeake Bay and local TMDLs, and information about local events and projects. Facebook posts generally take place multiple times per month on various topics, including issues like pet waste and feeding waterfowl.

Strategy 2: Media Materials

5. **Local News Media:** Includes TV, radio, print, and digital news organizations as well as City Press Releases. Messaging will occur when there is an important stormwater project or program taking place within Harrisonburg.

Strategy 3: Speaking Engagements

- All speaking engagements attended by stormwater staff are focused on explaining water quality, including TMDLs, as well as Harrisonburg's role in meeting the Chesapeake Bay TMDL. These speaking engagements do not include Blacks Run Clean Up Day, Middle School Watershed Field Trips, or the annual rain barrel workshop as these events are counted as Public Involvement Activities.

Strategy 4: Workshops/City Programs

- As part of advertising City programs aimed at installing or promoting stormwater BMP installation, City staff communicate the reasons why bacteria are an issue in local water quality as well as ways for landowners to reduce impacts from their property.

Strategy 5: Staff Training

- As part of the Good Housekeeping / Illicit Discharge training, city staff are trained bi-annually on stormwater issues. In addition to the requirements identified in Part I E 6 m, this training also includes information about Harrisonburg's watersheds and water quality impairments, and TMDLs. The training is given to staff through an online training platform called VectorSolutions (formerly TargetSolutions).

Appendix C: Physical Interconnection Notice Letters



City of Harrisonburg, Virginia Office of the City Manager

345 South Main Street
Post Office Box 20031
Harrisonburg, VA 22802
(540) 432-7701 / FAX (540) 432-7778

Kurt D. Hodgen
City Manager

June 24, 2014

Mr. Charles W. King, Jr., Senior Vice President
James Madison University
MSC 7606
Harrisonburg, VA 22807

Mr. Dale Chestnut, Stormwater Coordinator
James Madison University
MSC 7004
Harrisonburg, VA 22807

RE: MS4 Interconnections and JMU Foundation Properties

Dear Mr. King and Mr. Chestnut,

The City of Harrisonburg is a Phase II (small) MS4 and is regulated under the General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems. The purpose of this letter is to notify you, an operator of a downstream MS4, that there are physical interconnections between our storm sewer systems.

We are also writing to acknowledge our understanding from conversations with Mr. Chestnut that James Madison University will not cover JMU Foundation Properties under its own MS4 permit. Therefore, the City will include JMU Foundation Properties as part of the City's regulated land under the MS4 permit, and will include JMU Foundation Properties in our calculation of pollutant loads and required reductions for the Chesapeake Bay TMDL special conditions. Please be advised that the City is considering a stormwater utility fee to fund the cost of operating its stormwater program and that JMU Foundation Properties under the current arrangement would *not* be exempt from the fee.

We ask that James Madison University confirm in writing by July 31, 2014 that the JMU Foundation Properties are to be included as part of the City's regulated land for the purposes of the MS4 permit.

If you have any questions, please do not hesitate to contact Thanh Dang, Public Works Planner, at 540-434-5928 or Thanh.Dang@HarrisonburgVA.gov.

Sincerely,

A handwritten signature in blue ink that reads "Kurt D. Hodgen".

Kurt D. Hodgen
City Manager



City of Harrisonburg, Virginia
Office of the City Manager

345 South Main Street
Post Office Box 20031
Harrisonburg, VA 22802
(540) 432-7701 / FAX (540) 432-7778

Kurt D. Hodgen
City Manager

June 24, 2014

Mr. Charles A. Kilpatrick, PE, Commissioner
Virginia Department of Transportation
1401 East Broad Street
Richmond, VA 23219

Roy T. Mills, State Stormwater Program Administrator
Virginia Department of Transportation
1401 East Broad Street
Richmond, VA 23219

RE: MS4 Interconnections

Dear Mr. Kilpatrick and Mr. Mills,

The City of Harrisonburg is a Phase II (small) MS4 and is regulated under the General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems. The purpose of this letter is to notify you, an operator of a downstream MS4, that there are physical interconnections between our storm sewer systems.

If you have any questions, please do not hesitate to contact Thanh Dang, Public Works Planner, at 540-434-5928 or Thanh.Dang@HarrisonburgVA.gov.

Sincerely,



Kurt D. Hodgen
City Manager

Appendix D: Dry Screening and Outfall Inspection Methodologies

General Overview

- Each year, staff will conduct mandatory dry screenings of a minimum of at least 50 outfalls per Part I E 3 c (2)(c). Additional inspections may occur if time and resources allow.
 - Dry weather field screening to detect illicit discharges in specific areas may also be defined based on criteria such as infrastructure, land use, historical illegal discharges, dumping or cross connections.
- Dry screening inspections cannot be performed when precipitation is greater than 0.5 inches within the previous 48-hour period.
- The Environmental Specialist and Stormwater Compliance Specialist will perform outfall inspections.
- Number of outfalls inspected will be reported to DEQ annually in the MS4 Annual Report including:
 - The screenings results, and
 - Detail of any follow-up actions necessitated by screening results
- Inspections completed on Cityworks app.
- Adding/Moving outfall locations can be done using ArcGIS online outfalls map
- Print out the newest version of the City of Harrisonburg Outfall Inspection Policy.
- Print out newest version of the Outfall Inspection Form. -Optional as inspection is on Cityworks
 - Outfall Inspection Forms are updated based on GIS and inspection needs and can be found at: <U:\Stormwater\Illicit Discharge Detection & Elimination\Outfall Inspections\Outfall Inspection Form.docx>
- GIS Coordinator adds new outfalls and storm sewer system information into the GIS as new construction information is processed through the Community Development Department.

Pre-Inspection Procedure

- **Materials needed:**
 - a. Waders
 - b. Smartphone
 - i. Collector for ArcGIS application (*for adding/moving outfall locations*)
 - ii. Latest version of Cityworks app
 - c. Outfall Inspection Form (*on Cityworks*)
 - d. Illicit Discharge Reporting Form (*on Cityworks*)
 - e. City of Harrisonburg Outfall Inspection Policy
 - f. Clipboard
 - g. Pen/Pencil
 - h. Safety Vest & Hard Hat
 - i. Measuring Tape
 - j. Battery Pack
 - k. Head Lamps
- **Pre-Inspection Map Review:**
 - a. Use Cityworks and ArcGIS Online outfalls map to determine outfalls previously inspected to plan out where to inspect outfalls this year.

Inspection Procedure

- Inspection instructions shall be as follows:
 1. Walk from downstream to upstream (if in the stream, as to not disturb water or sediments, inspect outfalls one at a time).

2. **Complete Inspection Form:** Use the Cityworks app to fill out information about each outfall. Paper inspection forms are only for backup. At a minimum upload a geographic image and a condition image into the app. Additional images, if desired, may be uploaded into the app.
 - a. Note: Facility ID needs to be filled out in the Cityworks app. The format is year and inspection number (YYYY-##).
 - b. Note Cityworks Priority Ranking Field. This field may be used to determine priority areas to refine future inspections.
 - i. 1: Outfall is in “good” condition. There are no structural issues to the outfall, no erosion around the outfall, and there is no trash or debris surrounding the outfall.
 - ii. 2: Outfall is in “okay” condition. There are no major structural issues, only minor erosion around the outfall, and/or only some trash or debris surrounding the outfall.
 - iii. 3: Outfall is in “poor” condition. There are major structural issues, erosion around the outfall, and/or large amounts of trash or debris surrounding the outfall.
 - c. Note: remember to hit the sync button frequently after completing an inspection to make sure the information has successfully been submitted. If it is discovered that the inspection(s) information did not successfully get submitted/saved, staff will re-inspect the outfall(s).
 3. **Adding/Modifying Outfall Location:** If an outfall location needs to be added or modified:
 - a. Use the Collector or Field Maps app and the “Outfalls official” map to edit using the “MS4Outfalls – MS4 Outfalls” layer.
 - i. If adding a new point, complete all attribute fields. Once you submit the point on the Collector app, it should be available on the Cityworks app to complete the inspection.
 4. **Illicit Discharge Discovered:** In the event that an outfall is suspected to have an illicit discharge, document the outfall/illicit discharge on the inspection form and fill out an Illicit Discharge Reporting Form (on Cityworks app). The suspected illicit discharge shall be handled with illicit discharge procedures set forth at <U:\Stormwater\Illicit Discharge Detection & Elimination\Illicit Discharge\Administrative>
 - If the illicit discharge is historical (staining, dried material, etc.) take note on the Inspection form and note if follow-up/education activities are necessary.
- When back in the office, enter data from paper form to Cityworks, if any.

Last updated: 3/14/2024

IDDE Investigation Process

Definitions:

Illicit Discharge Detection Inspection Team (IDDE TEAM): Public Works Sustainability and Environmental Manager, Environmental Specialist - Stormwater Field, Business Services Manager, Stormwater Compliance Specialist, General Program Supervisor- Stormwater (as needed), other Public Works staff as directed by the Sustainability and Environmental Manager or Business Services Manager or their designee.

Lead Investigator: Stormwater Compliance Specialist and Environmental Specialist - Stormwater Field are the lead investigators for Illicit Discharges (non-emergency).

Other Responsible Parties: Hazardous spill response is the responsibility of the Fire Department, storm sewer overflows are the responsibility of Public Utilities, other spill response or pollution complaints may be routed through another agency such as the Virginia Department of Environmental Quality.

- Informational business cards have been distributed to City staff and citizens to direct illicit discharge detection efforts. The card information is as follows:
 - Stream or Storm Sewer: (540) 434-5928 (Public Works)
 - Construction Issues: (540) 432-7700 (Community Development)
 - Sanitary Sewer Overflows: (540) 434-9959 (Public Utilities)
 - Trash & Solid Waste: (540) 434-5928 (Public Works)
 - Large Spill or Emergency: 911

Other Entities: If a source is traced to jurisdictional boundaries, the following individuals will be notified to take up the investigation.

VDOT		
Position	Phone	Email
Call Center	1-800-367-7623	IDDEReports@vdot.virginia.gov

James Madison University		
Position	Phone	Email
Stormwater Coordinator	(540)-568-3174	witmanad@jmu.edu
Safety Training Coordinator	(540)-568-4535	hill2kn@jmu.edu

Work Control	(540)-568-6101	fm_wcc@jmu.edu
Campus Police	540-568-6911	pd_dispatch@jmu.edu

Rockingham County		
Position	Phone	Email
Environmental Manager	(540)-564-1529	ahancock@rockinghamcountyva.gov

DEQ		
Position	Phone	Email
Jennifer Hottinger	(804)-652-5812	Jennifer.hottinger@deq.virginia.gov
<ul style="list-style-type: none"> • Spill is a hazardous substance greater than 5 gallons • Spill is a hazardous substance in any quantity that reaches the stream 		
Eli Connel	(540)-830-0258	eli.connell@deq.virginia.gov
<ul style="list-style-type: none"> • When Jennifer is unavailable 		
Greg Clark	(540)-574-7911	gclark@deq.virginia.gov
<ul style="list-style-type: none"> • Spill is suspected or known to be from fuel tank (non-vehicle) 		

Potential Illicit Discharge: A pollutant having entered the storm sewer system but there is no evidence that the pollutant entered a live waterway (blue line).

Actual Illicit Discharge: A pollutant having entered the storm sewer system and there is evidence that the pollutant entered a live waterway.

Suspect Illicit Discharge: A dumping activity or spill that has not entered the storm sewer system or a live waterway.

Unfounded Complaint: Incidents reported as an illicit discharge that are inspected by City Staff and determined to be an unfounded complaint.

Storm Sewer System: includes ditches, storm drains, inlets, curb and gutter, the street, stormwater BMPs

Public Works Spill Response SOP

Situations:

1. Immediate cleanup is required for safety reasons (e.g. fuel spilled in roadway, fuel in waterway).
 - a. Call HFD if needed (use 911). HFD will already be on scene if ECC has been called.
 - b. Respond as usual with whatever ECC/HFD needs.
 - c. HFD and PW should focus on containing the spill until the violator (if known) is able to secure a private cleanup company to come to the site for cleanup and remediation.
 - i. Put everything on one work order.
 - ii. PW will bill if HFD does. HFD bills if the spill was not an accident or it was not self-reported. If HFD is not involved, PW can bill for cleanup. Generally, PW will not bill if it was an accident and self-reported.
2. If PW find a spill of hazardous material (ex: semi-truck oil dumping incident)
 - a. Contact HFD – (can use 911 or non-emergency ECC number so their system logs the incident)
 - b. If the violator is known, HFD or PW will call an environmental cleanup company and the violator will get the bill. PW will not volunteer to do remediation unless it is necessary (ex: if the violator is not known)
3. Things like washwater, grease dumping, powerwashing, etc.
 - a. HFD not needed.
 - b. If violator is known, PW will issue NOV Warning Letter and require violator to clean up within a certain timeframe and submit proof to PW. If they do not clean up, PW will use the enforcement procedures.
 - i. If they do not clean up, PW may optionally decide it is in our best interest to clean up and bill them.
 - c. If violator is not known, PW will clean up.

Mike Armstrong, Keith Link, and Bill Smiley are the primary HFD contacts.

Note: HFD is responsible for containing a spill in an emergency situation. PW is responsible for ensuring remediation after containment and long-term water quality protection. The preference is for cleanup and remediation to be performed by a private cleanup company.

Report to DEQ

Notify DEQ Valley Regional Office Pollution Response Coordinator (Jennifer Hottinger - Jennifer.Hottinger@deq.virginia.gov -Cell - 804-652-5812)

1. Spill is a hazardous substance greater than 5 gallons (this is less than required, but done to give a heads up)
2. Spill is a hazardous substance in any quantity that reaches the stream

Notify DEQ Environmental Engineer (Greg Clark- glclark@deq.virginia.gov – 540-574-7911)

1. Spill is suspected or known to be from a non-vehicular tank (e.g. fuel tank)

Investigation and Documentation Process:

4. Report of illicit discharge events are received by city staff (report may have been received by phone, in person, email, online form, etc., <http://www.harrisonburgva.gov/report-pollution>). Reporting information is routed to lead investigators. If the lead investigators are unavailable, they will notify the rest of the team and another member will respond.
 - a. Calls received at Public Works (540) 434-5928 are routed via Cityworks to the Public Works Sustainability and Environmental Manager. Emails received via report-pollution@harrisonburgva.gov are sent to Public Works Sustainability and Environmental Manager, Stormwater Compliance Specialist, Business Services Manager, and Environmental Specialist - Stormwater Field. Response to emails is routed to the lead investigator first and other IDDE Team members as needed.
 - b. Deputy Fire Marshall – Fire Marshall will route information to the IDDE Team during routine inspections as needed. They will email pictures to the generic pollution reporting email address or directly contact a member of the Public Works Illicit Discharge Detection Inspection Team.
 - c. The Fire Department will notify Public Works Sustainability and Environmental Manager of an incident that may affect the storm sewer system. If the incident occurs outside of business hours, they will notify the Public Works Sustainability and Environmental Manager during the next business hours.
 - d. Spills during municipal operations will be responded according to the procedures set forth by that department. Significant spills that require interdepartmental coordination should be routed to Public Works and the IDDE Team. Spills should be reported to a member of the Public Works Illicit Discharge Detection Inspection Team if it is large enough to be of a reportable quantity.
 - e. Scans occur daily for potential illicit discharges through public works field staff. If a potential discharge is observed, they will contact the a member of the IDDE Team. Field conducts city scans during daily field operations.
5. Lead investigators will travel out to the site to inspect the potential illicit discharge. Both lead investigators have an IDDE backpack full with supplies (First Aid Kit, Gloves, Flashlight, Notepad, Pens, Measuring Tape, Hand Gel, Duck Tape, Water Collection Bottles, pool testing strips, Bags, Dye) that help them test and identify substances safely. Investigators should also have the Cityworks app downloaded to their mobile device for access in the field.
 - a. Lead investigators will trace back manholes or the stream to find the source of the pollution.

- i. If an illicit discharge is found, but within six months of the beginning of the investigation neither the source nor the same non-stormwater discharge has been identified, then this shall be documented.
 - ii. If the observed discharge is intermittent, then Lead Investigator must document that a minimum of three separate investigations were made in attempt to observe the discharge when it was flowing. If these attempts are unsuccessful, the investigator must document.
- b. An unknown substance can be tested with the materials in the IDDE backpack, the incubator located at the Public Works Department, through a third party consultant, and/or with the Central Shenandoah Planning District Commission's IDDE kit – available to IDDE Team by calling (540) 885-5174. (See attachment)
 - i. Testing procedures should be consistent with the [*Illicit Discharge Detection and Elimination Field Guide: How to Identify and Quickly Report Pollution Problems.*](#)
- c. As needed, investigators and IDDE Team will coordinate and dispatch a clean-up (this may involve other City departments), contact the property owner and/or responsible party, and request from the property owner/responsible party mitigation procedures (Corrective Action Plan) be documented and put into place as soon as possible. Any procedures developed will be filed with the City's IDDE Report to ensure corrective action. Enforcement escalation is outlined below. Timeframe for follow-up investigation and corrective action is determined on a case-by-case basis.
 - i. Notice of Violation Warning Letter - A warning letter is issued for a first offense illicit discharge with typically a two week follow-up investigation by the City.
 - ii. Corrective Action Plan – A Corrective Action Plan outlines the actions needed to address the spill response specifically and mitigation measures to be implemented to prevent further spills. This may be included in the Notice of Violation Warning Letter as well as any subsequent Notice of Violation letters.
 - iii. Notice of Violation/ Remediation Bill– A notice of violation/remediation bill letter is issued after a second offense, if corrective action has not been taken upon a follow-up 2 week investigation, or if the cleanup requires immediate response from city staff because the incident is time sensitive. (See Illicit Discharge Enforcement Procedure section below)
 - iv. Civil/Criminal Penalties

6. The individual from the IDDE Team that responded to the incident will fill out an Illicit Discharge Reporting Form in Cityworks regardless of whether the event was unfounded, potential, suspect, or actual illicit discharge. This individual is also responsible for coordinating with the IDDE Team to follow up on the investigation and ensure sufficient pictures, documentation of correspondence, etc.
 - a. Public Utilities will send notification to the Virginia Department of Environmental Quality if sewer system material enters the storm sewer system, a body of water, or onto land. A copy of this letter is forwarded to the Public Works Sustainability and Environmental Manager and is filed in the U:\ folder (as outlined below).
 - b. Fire Department sends a list of spill responses to the Public Works Sustainability and Environmental Manager. More information on each incident is available upon request.
7. The completed IDDE form will be filed in the U:\ drive folder location (U:\Stormwater\Illicit Discharge Detection & Elimination) where associated documentation will be saved based on property tax map number as well. All information, including emails reporting the incident (if any), should also be saved in the associated Cityworks Inspection.
8. Public Works Sustainability and Environmental Manager or their designee will fill out fields in ArcGIS layer illicit discharge tracking and link that event to a file folder on U:\ drive.
9. Illicit discharge team will update U:\ drive folder with documentation, photos, letters, emails, etc. associated with the illicit discharge event.
 - a. Files saved in the folder will be saved by [tax map number] [date investigation initiated year – month -day] [other additional title]. Examples:
 - i. 010-C-8 2014-02-06 IDDE Report Form.pdf
 - ii. 010-C-8 2014-02-06 Investigation Notes.docx
 - b. A time frame upon which to conduct an investigation or investigations to identify and locate the source of any observed continuous or intermittent non-stormwater discharge to be prioritized as follows per the MS4 permit: *(i) illicit discharges suspected of being sanitary sewage or significantly contaminated must be discharged first, (ii) investigations of illicit discharges suspected of being less hazardous to human health and safety such as noncontact cooling water or wash water may be delayed until after all suspected sanitary or significantly contaminated discharges have been investigated, eliminated, or identified. Discharges authorized under a separate VPDES or state permit require no further action under this permit.*
 - c. Notice of Violation: City Code Section Title 7, Chapter 6

- *Notice of violation. Whenever the city manager or his designee finds that a person or entity has violated a prohibition or failed to meet a requirement of this chapter, the city manager or his designee may order compliance by written notice of violation to the responsible party.*
 - Sustainability and Environmental Manager – Keith Thomas is our designated IDDE Team member that assists with enforcement provisions according to the aforementioned City Code. ([See 7/22/21 email from Tom Hartman](#))
10. Investigators may use the Center for Watershed Protection’s publications as guides, http://www.cwp.org/online-watershed-library/cat_view/64-manuals-and-plans/79-illicit-discharge-detection-and-elimination:
- i. *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments*
 - ii. *Illicit Discharge Detection and Elimination: Technical Appendices*
 - iii. *Illicit Discharge Detection and Tracking Guide*
 - iv. *Illicit Discharge Detection and Elimination Field Guide: How to Identify and Quickly Report Pollution Problems:*
http://www.cspdc.org/programs/environment/documents/IDDEFieldGuideShenandoah_121914_002.pdf
11. When IDDE event is closed, the Lead Investigator will contact the Stormwater Compliance Specialist to complete the Illicit Discharge Reporting Form and will contact Public Works Sustainability and Environmental Manager to update the ArcGIS layer accordingly.
12. A summary of the illicit discharge inspection reports will be included with the MS4 Annual Report and will include required information: (i) *date that suspected discharge was observed, reported, or both;* (ii) *how the investigation was resolved, including any follow-up, and (iii) resolution of the investigation and the date the investigation was closed.*

Illicit Discharge Enforcement Procedure

Outstanding Questions/Actions

1. The City Attorney will need to create a summons specifically for IDDE at magistrates office
2. City Attorney to make sure that the civil penalty amount (\$1,000/day) was pulled from state code

Procedures if certified NOV is refused

1. Following Zoning procedures- hand deliver the letter (with another staff member present). If no one answers the door, tape the letter to the door and take a picture.

Notice of Violation Procedure (1st Letter) (Note not the Notice of Violation Warning Letter)

1. Phone Call, Email, Site Visit: Letter (preferably certified mail) outlining the Notice of Violation
 - a. Notice of Violation should include:
 - A. Timeframe allotted to property owner to clean up the spilled/dumped material. Language stating that if the cleanup is not completed within a given timeframe, Public Works staff will coordinate clean up and bill the offender.
 - B. Procedure/guidance on how to properly cleanup the spill. Establish standards for cleanup with each incident.
 - C. Copy (cc) City Attorney, Fire Chief, and Deputy Fire Marshal, Director of Public Works
 - D. Save all correspondence to <U:\Stormwater\Illicit Discharge Detection & Elimination\Illicit Discharge>

Sec. 7-6-9. – Violations, enforcement and penalties.

(a) Notice of Violation

- 1) The performance of monitoring, analyses and reporting;*
- 2) The elimination of illicit connections or discharges;*
- 3) That violating discharges, practices or operations shall cease and desist;*
- 4) The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property; and*
- 5) Payment of the costs of administration and remediation; and*
- 6) The implementation of source control or treatment BMPs.*

If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be performed by a designated governmental agency or a contractor procured by the governmental agency and the expense thereof shall be charged to the violator.

Notice of Violation/ Remediation Bill Procedure (2nd Letter)

This procedure takes place during one of the following scenarios:

- Notice of Violation has been sent and the offender does not cleanup/remediate the spill in the allotted timeframe; or
 - The cleanup requires immediate response from city staff (time sensitive incident related to public safety).
- Second Notice of Violation letter is sent with bill attached. Copy the City Treasurer on this letter. Save the bill to the appropriate folder in to <U:\Stormwater\Illicit Discharge Detection & Elimination\Illicit Discharge>

1. To create bill:

- a. Public Works creates a Cityworks report of staff time (administrative and field), equipment, and material costs associated with remediating the spill. This bill is sent to the violator, with directive for payment to be sent to the City of Harrisonburg Treasurer's Office within 30 days. (Labor hours for city employees should not include benefits.)
- b. If the bill is paid, Public Works will need to request an advice/receipt from the Treasurer's Office.
- c. If the bill is not paid within 30 days:
 - a. Send Final Notice of Payment (stamp) with a 15 day deadline.
 - a. After 15 days, outstanding payment may be included on the next tax bill as a line item or possibly as a lien on the real estate property tax.
 - b. Send to City Attorney to record and to actively collect (simultaneously as Final Notice of Payment is sent)
 - a. If Attorney collects prior to the Treasurer's Office, he will notify the City Treasurer.
 - b. Contact Wesley Russ to review the letter prior to sending

Remediation and Civil Penalties Procedure

To be used if a company/corporation or individual is responsible (it's difficult to assess criminal penalties on a company/corporation) and on less severe ordinance violations.

- 1. Public Works creates a Cityworks report of staff time (administrative and field), equipment, and material costs associated with remediating the spill. This bill is sent to the violator, asking for payment to be sent to the City of Harrisonburg, Public Works Department within 30 days.
 - a. City labor time should not include benefits.
- 2. If the bill is not paid within 30 days:
 - c. Send to City Treasurer to be included on the next tax bill as a line item or possibly as a lien on the real estate property tax.
 - d. Send to City Attorney to record and to actively collect.
 - a. If Attorney collects prior to the Treasurer's Office, he will notify the City Treasurer.
 - e. Attorney will issue a court summons to the offender to pay the civil penalties.
 - a. Will have to docket in the courthouse the offender resides/has their place of business in if it isn't in Harrisonburg or the county
- 3. At court, the judge will decide final amount of civil penalties (may exceed the ordinance fine of \$1000/day).
- 4. After judge makes a ruling, City Attorney will undergo the collection process.

Criminal Penalties Procedure

To be used if NOV has been sent, offender has been appropriately educated, action continues to occur, and an individual offender can be held responsible. Criminal penalties may also be assessed if the incident is grave and intentional with clear environmental damage. For the former, the following process should be followed:

1. Remediation or Civil Penalties SOPs has been followed.
2. Action occurs again.
3. City Attorney sends Class 1 Misdemeanor summons.
 - a. City has one year to prepare and issue a summons for a criminal penalty.

Hazardous Materials Defined:

https://www.epa.gov/sites/production/files/2015-03/documents/list_of_lists.pdf

DEQ Enforcement: [Pollution Data and Reporting | Virginia DEQ](#)

Last Updated: 2/29/2024

Appendix F: VSMP Approval Letter



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219

Mailing address: P.O. Box 1105, Richmond, Virginia 23218

Fax: 804-698-4019 - TDD (804) 698-4021

www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4020
1-800-592-5482

July 1, 2014

Kurt Hogden, City Manager
City of Harrisonburg
345 S. Main Street
Harrisonburg, VA 22801

Dear Mr. Hogden:

In accordance with §62.1-44.15:27 G of the Virginia Stormwater Management Act (Act), the Department of Environmental (DEQ) has completed its review of the City of Harrisonburg's final Virginia Stormwater Management Program (VSMP) application package submitted on June 12, 2014. Based on this review, DEQ has determined that the City of Harrisonburg's VSMP is consistent with the requirements of the Act and the VSMP regulation in place prior to the 2014 session of the General Assembly. As you know, the General Assembly made changes to the Act during this past session that were signed into law on March 24, 2014.

Because these amendments to the Act were made late in the VSMP development process, DEQ recognizes that you were unable to include these revisions in your VSMP application package and grants provisional approval of City of Harrisonburg's VSMP. This provisional approval is conditioned upon your locality making the required revisions operational by July 1, 2014, and authorizes the City to operate a VSMP on July 1, 2014. When the required revisions are made, DEQ will provide the final approval of the City's VSMP.

Thank you for your cooperation in developing a VSMP. We look forward to continuing to assist the City with the implementation of its VSMP.

Sincerely,

A handwritten signature in black ink that reads "Melanie D. Davenport".

Melanie D. Davenport
Director, Water Division DEQ

C: Melanie Davenport, Director, Water Division
Frederick Cunningham, Director, Office of Water Permits
Joan Salvati, Manager, Local Government Stormwater Programs

Appendix G: Written Procedures for Operations and Maintenance Activities on City-Owned Stormwater Management Facilities

General Overview

The City shall require adequate long-term operation and maintenance of stormwater management facilities owned by the City. Public Works personnel inspect stormwater management facilities annually, generally in the Fall, and inform city departments responsible for the stormwater management facilities of any deficiencies found.

City departments are responsible for maintaining stormwater management facilities on properties they manage unless an alternative agreement with another city department has been established.

Stormwater Post Construction Inspection Procedure

Equipment Needed:

- Clipboard
- Pens/Pencil/highlighter
- Blank Inspection Sheet (Word document)
- Previous Inspection Report (Found in U:\)
- Record drawings of Facility (if available)/Facility information
- Manhole Hook (for underground facilities)
 - Flusher Truck may be necessary for inspection and maintenance of underground facilities – Coordinate with General Program Supervisor- Stormwater
- Sludge Judge (for underground facilities)
 - Flusher Truck may be necessary for inspection and maintenance of underground facilities – Coordinate with General Program Supervisor- Stormwater
- Camera

Pre-Inspection Procedure

Note: Inspections take place annually in October/November by Stormwater Compliance Specialist and Environmental Specialist.

Reports are labeled for maintenance needs that are as follows:

- High Priority: Maintenance to take place 1-6 months
- Medium Priority: Maintenance to take place in 6-9 months
- Low Priority: Maintenance to take place in 1 year

Reports can be done in Cityworks using the Annual Inspection Form or hardcopy as follows:

- Print a blank inspection report from the last folder (ZZ_Inspection Forms) in <U:\Stormwater\Construction-Post Construction BMPs-E&S-VSMP\Project - Facilities - City Owned> according to the type of BMP you intend to inspect.
- Print the previous inspection report (if applicable) found in the U:\ link provided above in the specific facility's folder. Use the previous inspection report to determine reoccurring issues in the facility upon the inspection.
- Check the Facility Tracking Excel sheet to determine the owner of your facility.
- Notify the Department lead (outlined below) of your planned inspections. Invite the lead to join in the field, although it is not required to complete the inspection.

- Parks and Recreation –
- Public Works – General Program Supervisor- Stormwater- Gene Sly (540) 434-5928
Gene.Sly@harrisonburgva.gov
- HEC—Jon Griffith (540)217-2219 jon@hbgelec.com
- City Schools – Chief Operating Officer or Coordinator of Operations
- Note the rainfall data information on the inspection report. Rainfall data can be gathered from weather.gov (this information will later be transferred to the electronic inspection form).
 - Type in Harrisonburg, VA into the search engine
 - Click ‘Get more detailed information’ under the weather graphic on the left.
 - On the far right of the site click on ‘3 Day History’ to gather precipitation data.
 - Precipitation (in.) is on the far right of the table. Record the sum of the rainfall in the last 3 days.

During Inspection Procedure

- Take an overall photo of the facility.
- Inspect the facility according to the guidelines provided in the inspection report. Cross-check with passed inspection reports to ensure that passed issues have been fixed.
- Take notes on the hardcopy inspection report in order to sufficiently complete the electronic inspection report in the office.
- Take photos of all areas that need maintenance, areas of concern that need to be monitored, or areas where you have follow-up questions.
- Document maintenance actions needed in each relevant section of the report in order to sufficiently complete the electronic inspection in the office.

Post-Inspection Procedure

- Upload all photos and label them with the inspection date. (Ex: BMPInspections_2014.10.31)
- All photos should be uploaded to <U:\Stormwater\Construction-Post Construction BMPs-E&S-VSMP\Project - Facilities - City Owned> in the folder specified for each BMP.

Last updated: 3/2019

Appendix H: Written Procedures for Inspection of Privately Owned Stormwater Management Facilities

City of Harrisonburg, VA

Design & Construction Standards Manual

Appendix J

Stormwater BMP Post-Construction Inspection Policy

Property owners are expected to maintain all stormwater BMPs in good working condition, functional per original design intent. Owners should seek out the assistance of landscape, engineering and biology professionals as appropriate to assess the condition and function of BMPs. Owners are encouraged to establish a regular program for such maintenance, based on specific needs for specific facilities. This may help to avoid costly repairs that could have been avoided by consistent, regular maintenance.

Owner is cautioned that the function of certain BMPs may be dependent upon other features of the original site design. For example, changes to ground character from re-grading, added impervious areas, redirection of roof runoff, etc. may change the effectiveness of the original stormwater facilities.

As outlined in the Stormwater Management BMP Facilities Maintenance Agreement, the property owner is responsible for conducting regular inspections of their BMP(s) every five years and submitting a report to the Department of Community Development. Inspection forms to be used are those in Appendix 9C of the VA Stormwater Management Handbook.

The reports shall be submitted to the Department of Community Development by July 1 of the inspection year, no earlier than 60 days prior. A separate report is required for each BMP covered under the project's approved Stormwater Management Plan.

Every five years, the property owner will be required to have a professional engineer certify that the BMP is functioning properly and as designed. The professional engineer shall submit the Inspection Form and use it as guidance, but it is expected that a complete inspection of the stormwater BMPs' condition be conducted. This should include assessment of underground systems, filter media, infiltration capabilities, vegetation condition and coverage, etc. A supplemental narrative may be necessary to complete a full assessment.

Should either the owner's or engineer's inspection find that maintenance is needed, the property owner will have 60 days from the date of inspection to complete maintenance and inform the Department of Community Development that work is complete and a re-inspection may be needed. Additional time may be granted by the Director of Community Development or designee on a case-by-case basis per the terms of the BMP Maintenance Agreement.

City staff may conduct "spot" checks of stormwater BMPs to ensure compliance. Should a BMP be found by to require maintenance, a letter will be sent to the property owner and follow up will be requested. The letter will detail the deficiencies found. Should the property owner fail to maintain the Stormwater BMP, enforcement actions may be taken by the City of Harrisonburg per the terms of the BMP Maintenance Agreement.

Appendix I: Written Procedures for Compliance and Enforcement of Inspection and Maintenance Requirements for Privately Owned Stormwater Management Facilities

CITY OF HARRISONBURG, VA

DESIGN & CONSTRUCTION STANDARDS MANUAL

APPENDIX I

STORMWATER MANAGEMENT/ BMP FACILITIES MAINTENANCE AGREEMENTS

Procedures for Submitting Agreements

- Agreements are submitted to the City of Harrisonburg, Department of Planning & Community Development, 409 S. Main Street, Harrisonburg, Virginia 22801.
- Obtain **original** agreement from the Department of Planning & Community Development or from the City's Design Construction Standards Manual (DCSM).
- **Type** all information on form.
- **Submit** draft agreement with exhibit(s) for City review **prior to signature**.

Following approval:

- Sign form in **black ink**.
- Signature must be properly notarized (black ink).
- If the Landowner is a corporation, partnership, trust, limited liability company, etc., provide official/legal documentation that the person signing is authorized to sign legal/contractual documents for the organization.
- Record agreement in County Clerk's office and provide copy of stamped document to City.

CITY OF HARRISONBURG, VA

STORMWATER MANAGEMENT/BMP FACILITIES MAINTENANCE AGREEMENT

THIS AGREEMENT, made and entered into this ____ day of _____, _____, by and between _____ hereinafter called the
(Insert Full Name of Owner)
"Landowner", and the City of Harrisonburg, a Virginia municipal corporation, hereinafter called the "City".

WITNESSETH:

WHEREAS, the Landowner is the owner of certain real property described as City of Harrisonburg Tax Map/Parcel _____ as recorded by deed in the land records of Rockingham County, Virginia, Deed Book/Page _____, hereinafter called the "Property".

WHEREAS, the Landowner is proceeding to build on and develop the property; and
WHEREAS, the Site Plan/Subdivision Plan known as, _____, prepared by _____ and dated _____, hereinafter called the "Plan", which is expressly made a part hereof, as approved or to be approved by the City, provides for Best Management Practices (BMPs) for detention and/or treatment of stormwater within the confines of the property; and

WHEREAS, approximate locations of specific BMP facilities included on the Plan are shown on the attached (indicate by x):

___ Copy of City-approved final subdivision plat, or

___ City-approved scaled exhibit drawing of property; and

WHEREAS, the City and the Landowner, its successors and assigns, including any homeowners association, agree that the health, safety, and welfare of the residents of City of Harrisonburg, Virginia, require that on-site stormwater management/BMP facilities be constructed and maintained on the Property; and

WHEREAS, the City requires that on-site stormwater management/BMP facilities as shown on the Plan be constructed and adequately maintained by the Landowner, its successors and assigns, including any homeowners association.

NOW, THEREFORE, in consideration of the foregoing premises, the mutual covenants contained herein, and the following terms and conditions, the parties hereto agree as follows:

1. The on-site stormwater management/BMP facilities shall be constructed by the Landowner, its successors and assigns, in accordance with the plans and specifications identified in the Plan.

2. The Landowner, its successors and assigns, including any homeowners association, shall adequately maintain the stormwater management/BMP facilities. This includes all pipes and channels built to convey stormwater to the facility, as well as all structures, improvements, and vegetation provided to control the quantity and quality of the

stormwater. Adequate maintenance is herein defined as good working condition so that these facilities are performing their design functions. The required Inspection Report form(s) is(are) to be used to establish what good working condition is acceptable to the City.

3. The Landowner, its successors and assigns, shall inspect the stormwater management/BMP facility and submit an inspection report every five years by the method and date prescribed in the latest City's Design and Construction Standards Manual. The purpose of the inspection is to assure safe and proper functioning of the facilities. The inspection shall cover the entire facilities, berms, outlet structure, pond areas, access roads, etc. Deficiencies shall be noted in the inspection report.

4. The Landowner, its successors and assigns, hereby grant permission to the City, its authorized agents and employees, to enter upon the Property and to inspect the stormwater management/BMP facilities whenever the City deems necessary. The purpose of inspection is to follow-up on reported deficiencies and/or to respond to citizen complaints. The City shall provide the Landowner, its successors and assigns, copies of the inspection findings and a directive to commence with the repairs if necessary.

5. In the event the Landowner, its successors and assigns, fails to maintain the stormwater management/BMP facilities in good working condition acceptable to the City, the City may, after proper notice, enter upon the Property and take whatever steps necessary to correct deficiencies identified in the inspection report and to charge the costs of such repairs to the Landowner, its successors and assigns. The City shall allow Landowner 90 days to make necessary repairs before taking this action; however, for large scale repair work the City may, on a case-by-case basis, allow the Landowner to present for consideration an Action Plan and schedule for repairs. In such cases the City may require a bond, letter of credit, cash escrow or other acceptable surety to guarantee the work. This provision shall not be construed to allow the City to erect any structure of permanent nature on the land of the Landowner. It is expressly understood and agreed that the City is under no obligation to routinely maintain or repair said facilities, and in no event shall this Agreement be construed to impose any such obligation on the City.

6. The Landowner, its successors and assigns, will perform the work necessary to keep these facilities in good working order as appropriate. A maintenance schedule should follow those prescribed in the Plan, along with any recommendations included in the City's Design and Construction Standards Manual, manufacturers' guidelines, etc. This schedule shall be followed by the landowner, its successors and assigns.

7. In the event the City pursuant to this Agreement, performs work of any nature, or expends any funds in performance of said work for labor, use of equipment, supplies, materials, and the like, the Landowner, its successors and assigns, shall reimburse the City upon demand, within thirty (30) days of receipt thereof for all actual costs incurred by the City hereunder. This shall include costs which exceed those obtained through a surety provided in association with an Action Plan as described in Item 5 above.

8. Landowner, by execution of this Agreement, acknowledges that he/she has reviewed with the Engineer the specifics of the Plan and understands the function and maintenance requirements of all BMPs provided for on the Plan. Landowner agrees to maintain a copy of the Plan through the duration of ownership, and to transfer that plan to the new owner upon relinquishing the property.

9. This Agreement imposes no liability of any kind whatsoever on the City and the Landowner agrees to hold the City harmless from any liability in the event the stormwater management/BMP facilities fail to operate properly.

10. This Agreement shall be recorded among the land records in the Clerk's Office of the Circuit Court of Rockingham County, Virginia, and shall constitute a covenant running with the land, and shall be binding on the Landowner, its administrators, executors, heirs and any other successors and assigns in interests, including any homeowners association.

11. This agreement shall be governed by the laws of the Commonwealth of Virginia.

12. Any disputes arising from or as a result of this Agreement shall be resolved in the Circuit Court of Rockingham County, Virginia.

13. If any provision of this Agreement is found to be illegal, invalid, or unenforceable, that shall not affect the validity or enforceability of any other provision of this agreement.

WITNESS the following signatures and seals:

Company/Corporation/Partnership Name

Address

City, State Zip Code

By: _____
(Signature)

(Type Name)

(Type Title)

STATE OF _____ CITY/COUNTY OF _____

The foregoing Agreement was acknowledged before me this day _____ of _____,
_____, by _____.

NOTARY PUBLIC

My Commission Expires: _____

My Commission No. is: _____

CITY OF HARRISONBURG, VIRGINIA

By: _____ City
Manager

STATE OF _____ CITY/COUNTY OF _____

The foregoing Agreement was acknowledged before me this day _____ of _____,
_____, by its City Manager.

NOTARY PUBLIC _____

My Commission Expires: _____ My Commission No. is: _____

Approved as to Form:

City Attorney

Date

Appendix J: Good Housekeeping Standard Operating



STANDARD OPERATING PROCEDURES FOR GOOD HOUSEKEEPING/POLLUTION PREVENTION

**A Programmatic Overview of the City of Harrisonburg's
Standard Operating Procedures**



March 2016

Revised December 2021

TABLE OF CONTENTS

1.0	Introduction and Purpose	79
2.0	Good housekeeping/pollution prevention training program	81
3.0	Defining and illicit discharge	82
3.1	Awareness during Daily Activities and Operations	83
4.0	Reporting procedures	84
5.0	General Maintenance & operational procedures	86
5.1	Vehicle Washing	87
5.2	Vehicle Maintenance	89
5.3	Vehicle/Equipment Storage	91
5.4	Fueling Areas	93
5.5	Dumpsters/Trash Cans-Solid Waste Collection and Recycling	94
5.6	Chemical Storage	95
5.7	Outdoor Loading	97
5.8	Outdoor Material Storage	98
5.9	Outdoor Material Stockpiling	98
5.10	Salt and Grit Storage	101
5.11	Power washing	102
5.12	Pesticides and herbicides	103
5.13	Street Sweeping	105
5.14	Storm Drain Maintenance	106
5.15	Exterior Building Maintenance	108
5.16	Landscape Management	109
5.17	Absorbent Matting Maintenance	110
5.18	Liquid Material Containment And Asphalt Truck Parking	111
6.0	Waste Management & DISPOSAL PROCEDURE	112
6.1	Construction Wastes	113
6.2	Aerosol Cans	113

6.3	Animal Carcasses	114
6.4	Antifreeze	114
6.5	Batteries	114
6.6	Treated Lumber	115
6.7	Empty Containers	115
6.8	E-Waste (Monitors and Computers)	116
6.9	Filters-Oil, Gas, Diesel, Paint	116
6.10	Fluorescent Lamps, HID, and Metal Halide Lights	116
6.11	Freon	117
6.12	Pesticides	117
6.13	Fluorescent Light Ballasts (PCB and Non-PCB)	118
6.14	Mercury Switches and Equipment	119
6.15	Oil, Gas, and Diesel Waste	119
6.16	Paint Waste-Latex, Solvent Based/OIL-BASED PAINT	120
6.17	Parts Cleaners	120
6.18	Rags, Wipes, Absorbents	121
6.19	Scrap Tires	122
6.20	Solid Waste-Trash	122
6.21	Surplus and Excess Property	122

APPENDICES

APPENDIX A: Spill Guidance

APPENDIX B: Reportable Discharge Form

ACRONYMS

BMP	Best Management Practice
CCA	Chromated Copper Arsenate
DEQ	Department of Environmental Quality
EPA	Environmental Protection Agency
FLB	Fluorescent Light Ballasts

HID	High Intensity Discharge
City	City of Harrisonburg
MCM	Minimum Control Measure
MS4	Municipal Separate Stormwater Sewer System
SDS	Safety Data Sheets
MVAC	Motor Vehicle Air-Conditioning
NMP	Nutrient Management Plan
NPDES	National Pollutant Discharge Elimination System
PCB	Polychlorinated Biphenyls
PCP	Pentachlorophenol
RCRA	Resource Conservation and Recovery Act
SWM	Stormwater Management
SWPPP	Stormwater Pollution Prevention Plan
TCLP	Toxicity Characteristic Leachate Procedure
VSMP	Virginia Stormwater Management Program

INTRODUCTION AND PURPOSE

The City of Harrisonburg (City) staff engage in a variety of activities that have the potential to influence water quality. This manual presents the standard operating procedures which the City will utilize to implement its Good Housekeeping/Pollution Prevention Program. The manual provides a set of written procedures and Best Management Practices (BMPs), which are meant to ensure that City operations are managed in ways that will minimize pollutants from entering the City's small municipal separate storm sewer system (MS4). The written procedures are required to be developed, implemented, and updated by the City as a condition of Harrisonburg's MS4 General Permit (MS4 Permit), the permitting mechanism designed to prevent pollutants from entering water bodies through stormwater runoff. The MS4 Permit authorizes stormwater discharges from MS4s to surface waters in urbanized areas of the Commonwealth of Virginia.

The MS4 program is part of the National Pollutant Discharge Elimination System (NPDES), which is authorized through the Clean Water Act (See Figure 1). With delegation from the Environmental Protection Agency (EPA), MS4 permits in Virginia are issued through the Virginia Pollutant Discharge Elimination System (VPDES) and administered by the Virginia Department of Environmental Quality (DEQ).

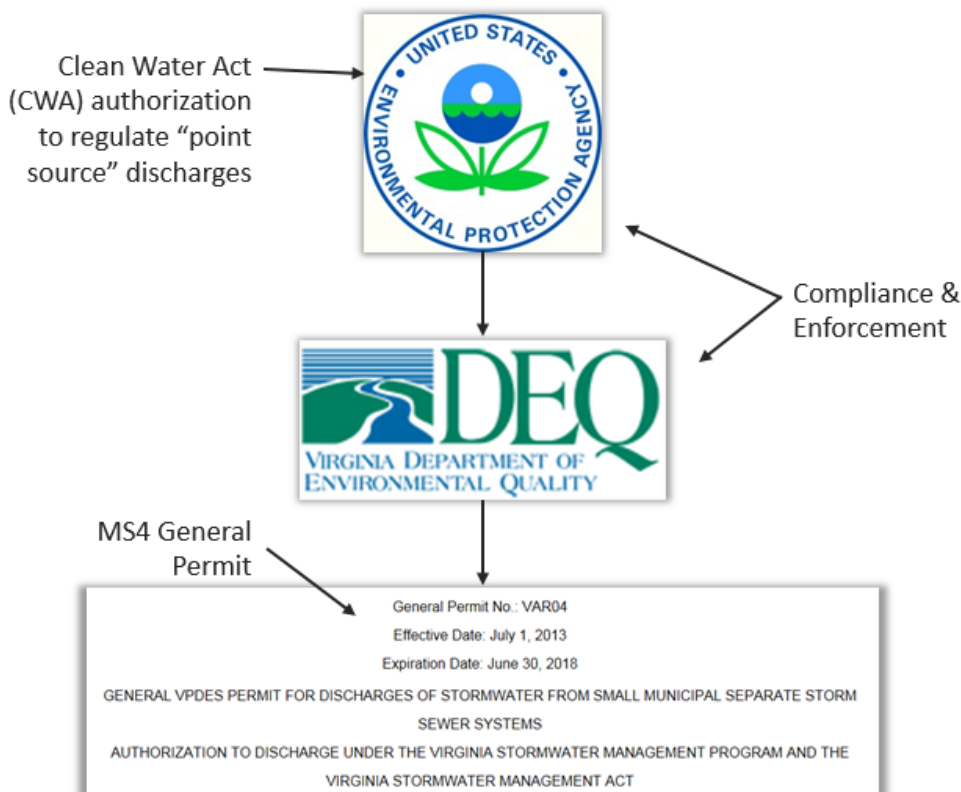


Figure 1. Generalized depiction of the regulatory framework for the MS4 permit.

The City’s Good Housekeeping/Pollution Prevention Manual includes three main components:

- **Documentation and Reporting** – Procedures to document all efforts related to the Good Housekeeping/Pollution Prevention process are outlined in Section 4.0 of this manual.
- **General Maintenance & Operational Procedures** – Standard Operating Procedures for daily maintenance and operational activities observed in the City are outlined in Section 5.0 of this manual.
- **Waste Management & Disposal Procedures** – Procedures for waste management and disposal of pollutants are outlined in Section 6.0 of this manual.

These components work within an overarching MS4 Program Plan that seeks to address the General Permit toward the goal of “closing the compliance loop.” They combine and function as a toolset to improve compliance on a site-specific level and create “standards of reducing pollutants to the maximum extent practicable (MEP).” Such an approach is intended to also help create a culture of awareness among city employees, where actions are taken to prevent pollution, in addition to skillfully and promptly responding to it.

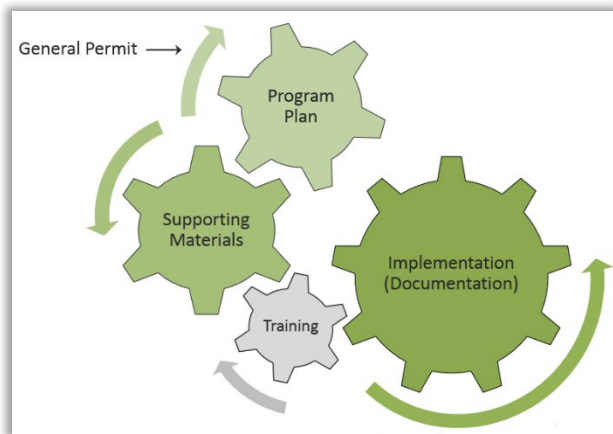


Figure 2. Graphical depiction of MS4 General Permit compliance components.

GOOD HOUSEKEEPING/POLLUTION PREVENTION TRAINING PROGRAM

The City's MS4 Program Plan requires Harrisonburg to conduct, or have provided, annual training to applicable field personnel, identified by the Sustainability and Environmental Manager, who play a role in the recognition and reporting of Good Housekeeping/Pollution Prevention. As part of the City's Program, this manual serves as training material for annual training to meet the permit requirement.

The written procedures herein serve as the foundation of a successful Good Housekeeping/Pollution Prevention Program that helps the City achieve MS4 Permit compliance. Implementation and documentation of the procedures are critical for achieving the Good Housekeeping/Pollution Prevention Program **goal to eliminate non-stormwater discharges** to the City's storm sewer system and, ultimately, receiving waters. These written procedures are to serve as guidance to all City-owned properties.

As referenced throughout this manual, the Good Housekeeping/Pollution Prevention Program relies on supplemental materials to assist with implementation and documentation. Applicable field personnel identified for Good Housekeeping/Pollution Prevention training should be familiar with each Section of this Manual and the supplemental materials provided in the Appendices of this Manual.

DEFINING AND ILLICIT DISCHARGE

The conveyance systems of an MS4 are vulnerable to contamination and can carry pollutants in stormwater runoff to receiving waters or wetlands. Substances other than stormwater that enter receiving waters are considered an illicit discharge. An illicit discharge can be: 1) a measurable flow from a storm drain during dry weather that contains pollutants or pathogens; 2) a unique frequency, composition, or mode of entry in the storm drain system; 3) caused when the sewage disposal system interacts with the storm drain system; and 4) discharges from pollutants from specific source areas and operations known as “generating sites.”

For the purposes of the City’s Good Housekeeping/Pollution Prevention Program, the VSMP regulation definition for an illicit discharge is generalized as:

Illicit Discharge - Any discharge to an MS4 that is not composed entirely of stormwater, except discharges specifically identified in the Virginia Administrative Code and determined not to be a significant contributor of pollutants to the MS4.

Most sources of an illicit discharge in the City are likely to originate from a generating site or activity, such as a vehicle washing area or maintenance area. These could result from daily practices or from a specific spill incident. Table 1 provides source pollutants that could be generated from areas of the City. Some may originate from the activities of a citizen instead of a municipal activity and should be reported to City staff.

Table 1. Examples of source pollutants of an illicit discharge.

• Automotive fluids (oil, fuel, antifreeze)	• Landscape waste (grass clippings, etc.)
• Cooking oil and grease	• Improperly applied fertilizer
• Solvents	• Sediment
• Paints	• Vehicle wash water
• Chemical cleansers (detergents, soaps)	• Sanitary sewer wastewaters
• Improperly applied pesticides/herbicides	• Dumpster leachate
• Improperly managed salts	• Trash

The regulations do have exemptions for some non-stormwater discharges. These discharges are not considered illicit discharges if they are not significant contributors of pollutants to the City’s MS4. Table 2 includes discharges relevant to the City that are not significant contributors of pollutants and are not considered illicit discharges. If there is uncertainty regarding the source or constituents within an observed discharge, the Sustainability and Environmental Manager should be contacted immediately so a determination can be made.

Table 2. Examples of sources that are not considered illicit discharges.

• Fire-fighting activities	• Air conditioning condensate
• Water line flushing	• Footing or foundation drains
• Landscape/lawn irrigation	• Springs
• Diverted stream flows	• Water from crawl space pumps
• Rising groundwater	• Dechlorinated swimming pool wastewater
• Uncontaminated groundwater infiltration	• Discharges from potable water sources
• Uncontaminated pumped groundwater	• Flows from riparian habitats and wetlands

Awareness during Daily Activities and Operations

Potential illicit discharges can be identified and removed prior to entering the storm sewer through inspection and appropriate follow-up of sources of pollutants that are exposed to precipitation, and subsequently to stormwater runoff. The City maintenance and operations employees are in the best position to identify these pollutants, such as those identified in Table 1. Figure 4 provides several examples of the observations and actions that could prevent an illicit discharge. If the observer is not qualified or appropriately trained to take the appropriate action, or if illegal dumping is observed, notify the Sustainability and Environmental Manager or designee.

<u>Observation</u>	<u>Action</u>
Uncovered dumpster	→ Cover dumpster
Uncovered container	→ Store container indoors
Oil/hydraulic fuel on ground	→ Clean & dispose of properly

Figure 4. Example daily observations and subsequent actions can prevent an illicit discharge.

REPORTING PROCEDURES

The City maintenance and operations employees are the first line of defense for preventing sources that could contribute to an illicit discharge. General guidance and steps to clean and contain a spill, release or discharge are provided in Appendix A. Actions that are taken to remove potential sources of an illicit discharge do not need to be reported unless it is suspected an illicit discharge has occurred or is occurring. In this case, the employee needs to report the concern to the Sustainability and Environmental Manager .

An illicit discharge or potential source for an illicit discharge may also be reported by other individuals who are not trained or authorized to perform necessary actions, such as residents or contractors. These individuals may recognize a potential illicit discharge after learning about pollution in stormwater runoff through the City's public education and outreach efforts, or by other means. The City stormwater webpage (<https://www.harrisonburgva.gov/stormwater-management-program>) provides reporting information so that the appropriate staff member will be contacted who will subsequently perform the appropriate follow-up action and provided documentation. If an employee is otherwise notified, the appropriate action should be taken and the Sustainability and Environmental Manager or designee shall be notified. Figure 5 summarizes this procedure. Illicit discharge and reporting information should be kept on file for three years. A spill that is large and potentially hazardous should be reported to the Harrisonburg Fire Department before being reported the Sustainability and Environmental Manager. The Harrisonburg Fire Department can assist in spill response and cleanup. If the suspected violator does not cease the pollution-causing activity, Police Administration should be notified.

Safety Contacts:

Emergency: 9-1-1

Non-Emergency: 540-434-4436

Police Administration: 540-437-2602

Fire Administration: 540-432-7703

VDOT, Rockingham County and James Madison University have interconnected MS4's with the City, meaning there is stormwater being conveyed to and from the City property. Any report from either

interconnected MS4 of a potential illicit discharge originating from the City should be immediately directed to the Sustainability and Environmental Manager or designee for investigation and documentation.

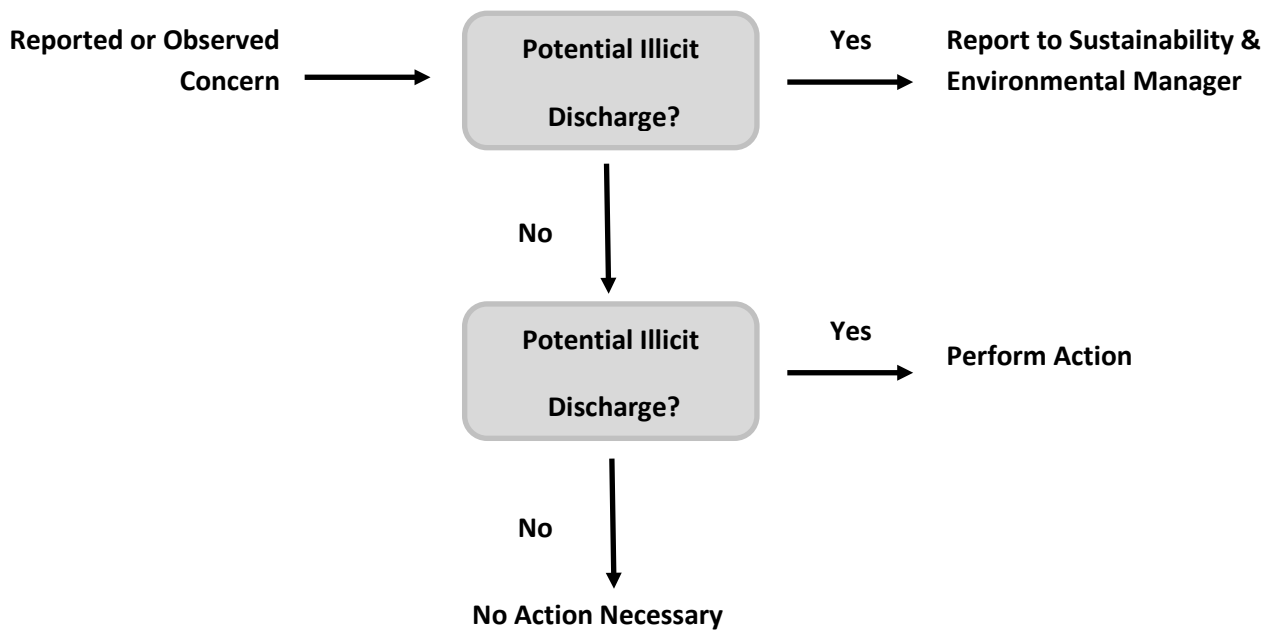


Figure 5. Reporting procedures for the City field staff.

GENERAL MAINTENANCE & OPERATIONAL PROCEDURES

The following sections review common procedures and operations that take place at specific locations in the City. These operations may generate potential sources of pollutants that can enter and contaminate the stormwater system and the receiving downstream waters. An overview of risk factors associated with each operation is provided, in addition to suggested Best Management Practices to help reduce the potential for contamination. Common types of wastes associated with municipal operations, as well as methods to address them, are described in more detail in Section 6. General guidance and steps to clean and contain a spill, release or discharge are provided in Appendix A.

Note: All staff is responsible for basic visual inspections of any pollutant-causing areas or activities during day-to-day operations.

Vehicle Washing

Improper vehicle washing can introduce a number of compounds into the MS4, including solvents, grease, sediment, and petroleum products as point source pollution (illicit discharge). Washing vehicles near any part of the MS4, including ditches or other conveyances that lead to the storm sewer, may cause these compounds to pollute a nearby water body. **Regular vehicle washing should take place at the Harrisonburg Department of Public Transportation (HDPT) facility for all City fleet vehicles. In some instances, vehicle/ equipment washing may take place at facility locations that have proper wash pad facilities in place to manage wash water.**

Best Management Practices

- ✓ Wash in designated wash bays that drain directly to the sanitary sewer.
- ✓ Vehicle washing should take place at HDPT designated areas, unless appropriate wash pad facilities are in place on site
- ✓ Wash vehicles on flat and pervious surfaces, such as grass or gravel (only with water- no soap, detergents, waxing, etc.).
- ✓ Use nozzles that automatically turn off water when not in use.
- ✓ If detergents or cleaners must be used, collect wash water and dispose of in the sanitary sewer using berms or pumps. Alternatively, use biodegradable detergents/cleaners and ensure that wash water is directed onto a pervious surface (i.e. grass).
- ✓ If washing is done outdoors on a flat pervious surface, the washing area should be visually inspected after each washing event to ensure that no unexpected pollutant sources are visually apparent in the waste water.
- ✓ Regular inspections should be conducted on wash bays to ensure that applicable components such as sand filters and drainage systems are functioning properly. Report any issues to the site supervisor.
- ✓ Facilities with SWPPPs should utilize written checklist inspections at least once annually.

Maintenance Schedule

Maintenance should be conducted on applicable wash bay components per the manufactured directions (i.e. sand filters) or on an as-needed basis. Site supervisor should retain record of any maintenance work and store on-site alongside this document.

Commonly Generated Potential Pollutants

- ❖ Vehicle soap
- ❖ Oil and hydraulic residue
- ❖ Sediment



Photo 1: Gravel area at public works facility.

Vehicle Maintenance

Vehicle maintenance practices involve a number of solvents, petroleum products, and other toxic compounds that must be stored and handled in accordance with procedures that prevent potential contamination of the MS4 or associated water bodies. **Small or minimal repairs can be performed on-site only if done indoors and proper disposal methods are followed. Large or extensive repairs should be done at the HDPT facility.**

Best Management Practices

- ✓ Vehicles should be maintained inside and under cover.
- ✓ Vehicles that are leaking any fluids should be put inside and under cover unless a drip pan can be utilized and emptied into the designated hazardous waste containers.
- ✓ Water used for tire leak detection should be disposed of in the sanitary sewer only.
- ✓ Remove leaking vehicles from service until repaired.
- ✓ Store leaking batteries in a secondary plastic container and store undercover in a designated hazardous waste location until third party contractor picks up. Schedule needed pickup with site supervisor.
- ✓ Apply absorbent on large spill areas and scrub immediately with a broom to encourage absorption. Once absorbed pick up with a flat shovel and dispose of the waste in a plastic bag and secure the bag for disposal in a covered dumpster. If material is hazardous, dispose of in labeled barrels or waste bins. Never hose down the affected area. Prevent fluids from entering the storm sewer by diverting any flows.
- ✓ Maintenance areas should be visually inspected at the end of each working day to ensure that issues are not present that could possibly effect water quality. Areas of concern should be addressed immediately.
- ✓ Facilities with SWPPPs should utilize written checklist inspections at least once annually.

Maintenance Schedule

Immediately place source controls where the identified issue is a potential concern to water quality; Conduct maintenance on the pollutant source as soon as practicable. Site supervisor should retain record of any maintenance work and store on-site alongside this document.

Commonly Generated Pollutants

- ❖ Oil and hydraulic fluid
- ❖ Antifreeze
- ❖ Batteries
- ❖ Grease
- ❖ Fuel



Photo 2: Spill kit at Public Works facility.

Vehicle/Equipment Storage

Vehicles are stored in the City due to seasonal operations such as snow removal, infrequent use, police evidence and fire training. Vehicles are potential sources of pollutants into the MS4 and other bodies of water, and therefore must be stored appropriately. Maintenance should take place in designated locations indoors or under cover, otherwise special care should be taken to ensure spilled or leaked fluids are contained.

Best Management Practices

- ✓ Vehicles used for police evidence and fire training should have any possible pollutant generating liquids/sources removed before storing. Examples include: fuel, batteries, antifreeze and hydraulic fluids.
- ✓ Store vehicles under cover, if possible.
- ✓ If leaking occurs outside, move vehicles away from storm drains and utilize a drip pan or absorbent material.
- ✓ Leaking vehicles should be placed inside or undercover unless a drip pan can be utilized and disposed of into designated waste containers.
- ✓ Clean up any observed spills or leaks and address the source. Ensure that parking areas are free of sediment and debris. Street sweep or clean as required to reduce mobilization of materials in stormwater.
- ✓ Regularly inspect individual pieces of equipment.
- ✓ Facilities with SWPPPs should utilize written checklist inspections at least once annually.

Maintenance Schedule

Immediately place source controls where the identified issue is a potential concern to water quality; Conduct maintenance on the pollutant source as soon as practicable. Site supervisor should retain record of any maintenance work and store on-site alongside this document.

Commonly Generated Pollutants

- ❖ Coolant (Antifreeze) – Green
 - ❖ Oil – Brown or Black
 - ❖ Fuel – Odor
 - ❖ Brake Fluid – Clear, Oily, Yellow
 - ❖ Power Steering Fluid – Yellow/Brown
 - ❖ Transmission Fluid – Oily or Reddish
 - ❖ Washer Fluid – Blue
-



Photo 3: Vehicle and equipment storage area at public works facility.

Fueling Areas

The City utilizes a number of vehicles for operations and maintenance, in addition to other gas-powered equipment. Fuel for fleet vehicles and equipment presents a particularly hazardous set of toxic compounds that can seriously impair the water quality of receiving water bodies if spilled or leaked. Extra care must be taken to ensure that staff are adequately trained to avoid spills, address them if they do occur, and prevent them from entering the storm sewer or any receiving water bodies. Fueling areas open for city use are available at Public Works and HDPT. Any issues with the fueling equipment should be directed to the site Supervisor.

Best Management Practices

- ✓ Refuel vehicles and equipment only in designated fueling areas that are graded away from storm sewer inlets.
- ✓ Fuel station covers should be as large as the grade break or fuel dispensing area with stormwater directed to perimeter drains.
- ✓ Provide spill kits in designated fueling areas and other locations where fueling may occur, such as maintenance facilities. Spill kits at Public Works and Park View are managed by the Stormwater Crew Supervisor and the spill kit at HDPT is managed by the Facilities Manager. Contact your site supervisor if a spill kit is needed at your maintenance shop.
- ✓ Facilities with SWPPPs should utilize written checklist inspections at least once annually.

Maintenance Schedule

Immediately place source controls where the identified issue is a potential concern to water quality. Conduct maintenance on the pollutant source as soon as practicable. Site supervisor should retain record of any maintenance work and store on-site alongside this document.

Commonly Generated Pollutants

- ❖ Gasoline and Diesel Fuel
- ❖ Waste Oil



Photo 4: Fueling area at the Public Works facility.

Dumpsters/Trash Cans-Solid Waste Collection and Recycling

Dumpsters and trash cans are potential producers of illicit discharges if polluted materials leak and travel to the storm sewer or receiving water bodies. However, as with other waste and chemical storage, proper storage and careful handling will minimize exposure. Dumpsters and trash cans without lids or covers allow rainwater to mix with the waste inside and produce polluted leachate that could then spill during unloading. Dumpsters and trash cans must also remain in good condition where nothing can leak out of the bottom and possibly contaminate the storm sewer and water bodies.

Best Management Practices

- ✓ Provide only covered containers, rather than those with completely open tops, to reduce the amount of rainwater entering the container.
- ✓ Place trash, recycling, and cigarette butt containers in high traffic areas, common areas, entrances to buildings, and sidewalk entries from parking areas. Increase the number or containers or frequency of emptying if overfilling is an issue.
- ✓ Provide adequate containers at service entrances such that all trash can easily be transferred during day to day cleaning.
- ✓ Provide secure areas for dumpster loading or unloading to prevent tampering, unwanted dumping and damage from other vehicles.
- ✓ If leaks are detected, take measure to ensure materials do not reach storm sewer inlets.
- ✓ Routinely inspect dumpster and trash can lids, as well as other surfaces, for deterioration or malfunction that may cause exposure to stormwater or allow leakage.

Maintenance Schedule

Immediately place source controls where the identified issue is a potential concern to water quality; Conduct maintenance on the pollutant source as soon as practicable. Site supervisor should retain record of any maintenance work and store on-site alongside this document.

Commonly Generated Pollutants

- ❖ Leaks
- ❖ Leachate
- ❖ Trash and Debris



Photo 5: Dumpster.

Chemical Storage

The City has a number of chemicals onsite that are related to routine cleaning and maintenance, and contractors possessing chemicals and chemical-dispensing equipment may also be in the City. All chemicals that could potentially contaminate stormwater and local waterways should be clearly marked and stored in secure locations. Contact Central Stores for all SDS information.

Best Management Practices

- ✓ Plainly label containers that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid responses if a spill occurs.
- ✓ Store materials away from high traffic areas and on structures that keep them from coming in contact with the floor such as wooden pallets.
- ✓ Storage, loading, and unloading areas should be covered or enclosed to reduce potential contact with stormwater.
- ✓ Routinely inspect storage areas for leaks or signs of deterioration that may cause exposure to stormwater or allow leakage.
- ✓ Site Supervisors or Department Directors should set up periodic pick-up of waste chemicals through a third party contractor who can assist with providing the proper storage containers and proper disposal.
- ✓ Facilities with SWPPPs should utilize written checklist inspections at least once annually.

Maintenance Schedule

Immediately place source controls where the identified issue is a potential concern to water quality. Conduct maintenance on the pollutant source as soon as practicable. Site supervisor should retain record of any maintenance work and store on-site alongside this document.

Commonly Generated Pollutants

- ❖ Solvents
- ❖ Automotive lubricants
- ❖ Pesticides
- ❖ Fertilizer



Photo 6: Chemical storage.

Outdoor Loading

Outdoor loading areas are potential sources of illicit discharge if polluted materials leak during transport to and from containers and vehicles. Spilled materials can mix with stormwater, so proper storage and handling is necessary to help minimize exposure.

Best Management Practices

- ✓ If possible, perform outdoor loading under a covered structure and in dry weather.
- ✓ Avoid positioning loading areas near storm drains.
- ✓ Grade or berm loading areas so that stormwater drains to a dead-end connection or sanitary sewer, rather than a storm sewer inlet or water body.
- ✓ Address material spills in a timely manner to avoid contact with stormwater.
- ✓ Routinely inspect loading areas for leaks or signs of deterioration that may cause exposure to stormwater or allow leakage.

Maintenance Schedule

Immediately place source controls where the identified issue is a potential concern to water quality. Conduct maintenance on the pollutant source as soon as practicable. Site supervisors should retain record of any maintenance work and store on-site alongside this document.

Commonly Generated Pollutants

- ❖ Varies based on material being loaded

Outdoor Material Storage

The City has material storage areas outside, and houses substances such as grease, paints, detergents, metals in these locations. These materials must be stored and handled in accordance with procedures that prevent potential contamination of the MS4 or associate water bodies.

Best Management Practices

- ✓ Cover materials with a tarp, if applicable. Secure sides of the tarp with sand bags or other heavier material. Appropriately label the area to indicate the stored materials that are present.
- ✓ Elevate bagged materials on pallets or other mechanism to avoid contact with stormwater runoff.
- ✓ Provide inlet protection in cases where migrating materials may enter storm drains.
- ✓ Clean up all migrating materials upon discovery and repair the source of the migrating pollutant to prevent potential contamination of stormwater.

Maintenance Schedule

Immediately place source controls where the identified issue is a potential concern to water quality. Conduct maintenance on the pollutant source as soon as practicable. Site supervisor should retain record of any maintenance work and store on-site alongside this document.



Photo 7: Outdoor material storage at the Public Works Facility.

Commonly Generated Pollutants

- ❖ Corroded materials
- ❖ Wood preservatives

Outdoor Material Stockpiling

The City has material stockpiling areas for the storage of bulk materials such as sand, mulch and gravel. These materials must be stored and handled in accordance with procedures that prevent potential contamination of the MS4 or associate water bodies. Long-term stockpiling is any material that will remain on site for more than 14 days.

Short-Term Best Management Practices

- ✓ Consider placing material on top of an impermeable membrane for quick clean-up.
- ✓ Consider placing an impermeable membrane on top of the stockpile and secure with cinder blocks/weight.
- ✓ When utilizing a portion of the stockpile, remove only a section of the protective covering so as to prevent moisture absorption and to minimize exposure to precipitation and wind.
- ✓ Store materials sufficiently away from storm drains or water bodies.
- ✓ Clean up all migrating materials upon discovery and repair the source of the migrating pollutant to prevent potential contamination of stormwater.
- ✓ Routinely inspect outdoor material stockpiles for migrating materials.

Long-Term Best Management Practices

- ✓ For soil stockpiles storage over 14 days, cover with a tarp or provide temporary turf stabilization to prevent erosion.
- ✓ Store materials sufficiently away from storm drains or water bodies.
- ✓ Provide three sided jersey barriers to serve as perimeter controls and sediment barriers. Install addition ESC controls as necessary (i.e. erosion eels, etc.).
- ✓ Provide inlet protection or move stockpile in cases where migrating materials may enter storm drains.
- ✓ Clean up all migrating materials upon discovery and repair the source of the migrating pollutant to prevent potential contamination of stormwater.
- ✓ Routinely inspect outdoor material stockpiles for migrating materials.

Maintenance Schedule

Immediately place source controls where the identified issue is a potential concern to water quality. Conduct maintenance on the pollutant source as soon as practicable. Site supervisor should retain record of any maintenance work and store on-site alongside this document.



Photo 8: Outdoor material stockpiling at the Public Works facility.

Commonly Generated Pollutants

- ❖ Migrating bulk materials

Salt and Grit Storage

Road treatment materials used during inclement weather, such as deicing salt and sand grit, should be carefully stored and handled to prevent migration into storm drains and waterways. **Salt should not be stored outside, only in designated undercover salt storage areas at Public Works and Park View Shops.**

Best Management Practices

- ✓ Storage, loading, and unloading areas should be covered or enclosed to reduce potential contact with stormwater. Non-soluble erodibles should be stored in the designed three sided bay/enclosures and solubles, such as salts, should be stored under cover.
- ✓ Another option for seasonal storage of sand/grit is to cover all outdoor material stockpiling areas with a tarp and secure tarp edges with sand bags or other heavier objects.
- ✓ Clean up all migrating materials upon discovery and repair the source of the migrating pollutant to prevent potential contamination of stormwater.
- ✓ During material delivery or loading, immediately clean spilled or tracked materials.
- ✓ Routinely inspect storage areas for migrating materials or deterioration of containment structures.
- ✓ Facilities with SWPPPs should utilize written checklist inspections at least once annually.

Maintenance Schedule

Immediately place source controls where the identified issue is a potential concern to water quality; Conduct maintenance on the pollutant source as soon as practicable. Site supervisor should retain record of any maintenance work and store on-site alongside this document.

Commonly Generated Pollutants

- ❖ Salts
- ❖ Sand and sediment



Photo 9: Sand storage area

Power washing

Power washing can concentrate organic sediment, precipitates, surface material, and cleaning solutions into wash water, which is characterized as an illicit discharge if it enters the MS4. Power washing water, cleaning agents, and other compounds should not enter the storm sewer system or water bodies. Care should be taken to prohibit the wash water from flowing into the storm sewer, including roof drains, downspouts, and any other conveyances leading to them.

Best Management Practices

- ✓ Identify storm drains and possible conveyances to storm drains prior to commencing with cleaning or washing, and take measures to prevent wash water from entering them.
- ✓ Use dry cleanup methods to remove debris prior to washing surfaces.
- ✓ Determine where wash water may pool and vacuum up or allow it to evaporate. Leftover material should be cleaned and disposed of in an appropriate manner.
- ✓ Water not containing chemicals or cleaning agents may be allowed to infiltrate in grass or gravel areas. Wash water containing chemical pollutants must be captured and disposed of in the sanitary sewer. Suspended solids and oils must be removed from the wash water using booms, absorbent matting, or other devices.
- ✓ Apply minimal water and prioritize dirty areas rather than cleaning or pressure washing an entire building surface. Before removing graffiti with a power washer, consider painting over it or using *World's Best Graffiti Remover* for bare brick, stone and masonry.
- ✓ Inspect work areas after completion to ensure all potential pollutants have been contained and adequately disposed of.

Maintenance Schedule

Immediately place source controls where the identified issue is a potential concern to water quality; Conduct maintenance on the pollutant source as soon as practicable. Site supervisor should retain record of any maintenance work and store on-site alongside this document.

Commonly Generated Pollutants

- ❖ Sediment
- ❖ Detergents



Photo 10: Power Washing.

Pesticides and herbicides

Grounds and building maintenance crews occasionally use pesticides and herbicides in routine operations, and the mixing and loading of applications into equipment is often in the same area where fueling and maintenance occurs. Consequently, these are the areas where an accidental discharge into the MS4 is likely to occur. Care should be taken to properly store, handle, and apply these chemicals in much the same manner as other hazardous materials, and only adequately trained staff should be responsible for their use. Contact Julie Fansler at Public Works for information on pesticide applications and required licenses. See Section 6.12 for proper disposal of unused pesticides.

Best Management Practices

Application:

- ✓ Pesticide and herbicide application needs to be done by a certified applicator.
- ✓ Pesticides and Herbicides should not be applied near or at water edges, except with City approved chemicals, which at this time is *AquaMaster*.
<http://monsantoito.com/pages/aquamaster/safety.asp>
- ✓ Apply herbicides and pesticides only after other, non-chemical approaches fail.
- ✓ Determine which products are the most useful and least environmentally harmful for a given situation and use sparingly and as directed by the manufacturer.
- ✓ Use chemical products only during weather conditions appropriate for the application and that will not potentially mix with stormwater in a rain event.
- ✓ Avoid applying chemicals within 5 feet of pavement, 25 feet of storm drain inlets, or 50 feet from a water body.

Spill Prevention:

- ✓ Spray equipment must be emptied of solutions before and storage.
- ✓ Wash water from application equipment must be disposed of in the sanitary sewer and any leftover material resealed in a container or disposed of at a hazardous waste collection location and disposed of by a contracted waste hauler.
- ✓ Store materials in a secure location and keep containers clearly labeled.
- ✓ Routinely inspect storage areas for leaks or signs of deterioration that may cause exposure to stormwater or allow leakage.

Maintenance Schedule

Immediately place source controls where the identified issue is a potential concern to water quality; Conduct maintenance on the pollutant source as soon as practicable. Site supervisor should retain record of any maintenance work and store on-site alongside this document.

Commonly Generated Pollutants

- ❖ Pesticides

Street Sweeping

Streets and parking areas are prone to collect and concentrate significant amounts of materials that contribute to polluted runoff into storm sewer systems and water bodies. Sediment, debris, trash, automotive fluids, road salt, and trace metals can be minimized by such practices as street sweeping. Standard street sweeping equipment can be employed along curbed streets and parking lots, while smaller equipment can be used to access other hardscape areas that may accumulate sediment and debris. In addition to reducing the chance and severity of polluted discharges into downstream waters, the practice also extends the useful life of stormwater basins by reducing the sediment load.

Best Management Practices

- ✓ Materials collected during cleaning activities should be disposed of at the Rockingham County Landfill.
- ✓ Materials collected during cleaning activities should not be temporarily stored onsite. If stored onsite, dewater the material; and then move the material to a location away from water bodies and drainage systems. Provide perimeter controls at the location until such time that the material can be hauled offsite.
- ✓ Equipment washout areas should be kept clean and inlets free of debris and sediment to prevent bypass. Use the minimum amount of water to wash equipment.

Maintenance Schedule

Maintain equipment per the manufacturer's recommendations. Site supervisor should retain record of any maintenance work and store on-site alongside this document.

Commonly Generated Pollutants

- ❖ Sediment
- ❖ Heavy Metals
- ❖ Automotive lubricants



Photo 11: Street Sweeper in action

Storm Drain Maintenance

Storm drains are often the point of entry into the storm sewer system, and they need to be cleaned and maintained on a regular basis to reduce the amount of pollution, trash, and debris into receiving water bodies. Storm drains are cleaned annually in the City of Harrisonburg by the Public Works department. Clogged drains can overflow, thereby increasing the volume of water flowing into downstream structures and streams, as well as the chances for damage and erosion. Public Works conducts annual inspections to prioritize maintenance needs on City storm drain inlets. Contact the Stormwater Crew Supervisor Gene Sly for additional information.

Best Management Practices

- ✓ Establish a routine inspection schedule for observing structural conditions and for screening potential illicit discharges.
- ✓ Utilize a vacuum truck for emptying materials trapped in drainage inlets and junction sumps or otherwise dispose of materials in accordance with state and federal regulations.
- ✓ Keep impervious surfaces clean of trash, debris, and sediment.
- ✓ Mark drainage inlets to maintain public awareness about illegal dumping.

Maintenance Schedule

Immediately place source controls where the identified issue is a potential concern to water quality. Conduct maintenance on the pollutant source as soon as practicable. Site supervisor should retain record of any maintenance work and store on-site alongside this document.



Photo 12: Leaves in storm inlet.

¹http://www.pwcgov.org/government/dept/publicworks/environment/PublishingImages/clogged_basin.jpg

Commonly Generated Pollutants

- ❖ Trash and debris
- ❖ Sediments
- ❖ Oil and Grease
- ❖ Antifreeze
- ❖ Paints
- ❖ Cleaners and solvents
- ❖ Pesticides
- ❖ Fertilizers
- ❖ Animal waste



Detergents

Exterior Building Maintenance

Maintenance of building exteriors may involve a number of different practices, from cleaning to resurfacing. Pressure washing, for example, can concentrate organic sediment, precipitates, surface material, and cleaning solutions into the wash water, which is characterized as an illicit discharge if it enters the MS4. Care should be taken to prohibit fluids from flowing into roof drains, downspouts, and any other conveyances leading to them.

Best Management Practices

Cleaning:

- ✓ Identify storm drains and possible conveyances to storm drains prior to commencing with cleaning or washing, and take measures to prevent wash water from entering them.
- ✓ Use dry cleanup methods to remove debris prior to washing surfaces.
- ✓ Determine where waste water may pool and vacuum up or allow it to evaporate. Leftover material should be cleaned and disposed of in an appropriate manner.
- ✓ Water not containing chemicals or cleaning agents may be allowed to infiltrate in grass or gravel areas. Wash water containing chemical pollutants must be captured and disposed of in the sanitary sewer. Suspended solids and oils must be removed from the wash water using booms, absorbent matting, or other devices.
- ✓ Apply minimal water and prioritize dirty areas rather than cleaning or pressure washing an entire area.

Painting:

- ✓ When painting, use water-based paints and thinners instead of oil-based whenever possible.
- ✓ Mix paint indoors before starting work to minimize the potential for spills entering the MS4.
- ✓ When using spray paint, use smaller paint containers with high pressure sprayers to minimize waste.
- ✓ Use impermeable drop cloths when painting. Immediately clean up all spills if they occur.
- ✓ Dispose of with third-party vendor "Environmental Options". Allow paint containers to completely dry before disposal.
- ✓ Routinely inspect work areas to ensure proper handling of materials and prevent contact with stormwater.

Maintenance Schedule

Immediately place source controls where the identified issue is a potential concern to water quality; Conduct maintenance on the pollutant source as soon as practicable. Site supervisor should retain record of any maintenance work and store on-site alongside this document.

Commonly Generated Pollutants

- ❖ Paints & Solvents

Landscape Management

Typical landscape maintenance practices can produce stormwater contaminants such as pesticides, soil, fertilizers, and debris which can pollute receiving water bodies. Maintaining an attractive City landscape can require considerable efforts in pruning, dressing, watering, and fertilizing. Steps can be taken to reduce the harmful effects of these practices on the stormwater system and water flowing into water bodies by reducing the number of inputs and waste, and by keeping maintenance crews adequately trained in best management practices. Currently, waste landscape material is transported offsite directly to the Rockingham County Landfill for recycling.

Important Note: The City should never apply any de-icing agents containing urea or other forms of nitrogen or phosphorus to parking lots, roadways, and sidewalks, or other paved surfaces.

Best Management Practices

- ✓ Compost lawn wastes and re-till into the soil of planting areas or mix into mulch.
- ✓ Minimize turf areas by planting groundcovers, wildflowers, and shrubs, thereby reducing mowing and water requirements.
- ✓ Select drought and heat resistant turf species, and do not cut turf shorter than 3 to 4 inches. Mower clippings should be left on the turf as a natural fertilizer, and ensure clippings are swept away from paved surfaces.
- ✓ Replace exotic plant species when necessary with regional, indigenous plants, which are typically more water efficient and disease resistant.
- ✓ Utilize low-volume irrigation methods and only water areas as needed to enhance plant root growth and avoid excessive runoff.
- ✓ Avoid stockpiling materials leftover from landscape maintenance. Collected leaf litter and excavated plant matter should be taken directly to the Rockingham County Landfill.

Routinely inspect work areas to ensure materials do not migrate to storm sewer inlets.

Maintenance Schedule

Immediately place source controls where the identified issue is a potential concern to water quality. Conduct maintenance on the pollutant source as soon as practicable. Site supervisor should retain record of any maintenance work and store on-site alongside this document.

Commonly Generated Pollutants

- ❖ Sediment
- ❖ Landscape Materials
- ❖ Fertilizers & Pesticides

Absorbent Matting Maintenance

Absorbent matting is designed to catch oils, fuels, and chemicals from leaking vehicles and equipment to ensure materials do not migrate to storm sewer inlets or directly into water bodies. They are most effective when covered and not directly exposed to precipitation. However, absorbent matting can be used as a temporary best management practice without cover as long as they are frequently inspected and routinely replaced.

Best Management Practices

- ✓ Place absorbent matting directly under leaking vehicles and equipment.
- ✓ For Facilities that do not have a SWPPP, establish a routine schedule for inspecting, cleaning and replacing matting.
- ✓ Wash matting in wash pad or wash bay where the waste water will enter sanitary system.
- ✓ Keep surface of matting clean of trash, debris, stone, and sediment.
- ✓ Facilities with SWPPPs should utilize written checklist inspections at least once annually.

Maintenance Schedule



Photo 13: Landscaped area

Immediately place source controls where the identified issue is a potential concern to water quality. Conduct maintenance on the pollutant source as soon as practicable.

Commonly Generated Pollutants

- ❖ Fuel
- ❖ Oil
- ❖ Hydraulic Fluids
- ❖ Grease

Liquid Material Containment And Asphalt Truck Parking

Liquid material operations and containment should be carefully handled and stored to prevent material migration into storm drains and waterways. The asphalt truck used at Public Works is a potential source of pollutants; and therefore should be appropriately cleaned of asphalt after use and stored under cover. Maintenance should take place in designated locations indoors or under cover, otherwise special care should be taken to ensure spilled or leaked fluids are contained.

Best Management Practices

- ✓ Place asphalt containment and truck under cover, if possible.
- ✓ Place absorbent matting or drip pans under truck if leaking fluids.
- ✓ Thoroughly clean truck after use prior to storage.
- ✓ Track the level of material in the tank to prevent overflows when replenishing.
- ✓ Promptly clean up any spilled asphalt onto the ground surface.
- ✓ Properly dispose of material that has spilled or leaked onto the ground surface.
- ✓ Routinely inspect area and clean up any spilled asphalt.
- ✓ Routinely inspect the asphalt truck for leaking fluids.

Maintenance Schedule

Immediately place source controls where the identified issue is a potential concern to water quality. Conduct maintenance on the pollutant source as soon as practicable.

Commonly Generated Pollutants

- ❖ Asphalt
- ❖ Oil and Fuel

WASTE MANAGEMENT & DISPOSAL PROCEDURE

Responsible management of chemical and material wastes can greatly reduce the amount of pollution in stormwater runoff. The City utilizes third party contractors and its own resources to either recycle materials or dispose of them safely offsite. **City Departments are responsible for setting up their own**

third party disposal contracts. The following sections describe the recommended procedures for managing and disposing of waste materials the City typically may encounter. For any of the materials listed below, always see the Safety Data Sheets (SDS), if available. Contact Jeff Moyer at Central Stores for all SDS information. The Good Housekeeping/Pollution Prevention Manual is not meant to supersede or replace any Safety Data Sheet or manufacturer's instructions, but rather supplement them and further reduce stormwater pollution. For information on the disposal of any waste, contact the City's third party disposal company:

Suggested Third Party Vendor: Environmental Options

Construction Wastes

Debris resulting from construction activities or work of contractor services is typically to be removed by the owner or contractor. These may include landscape and building materials, and removal may be subject to individual permit or contract conditions. There are several designated locations for waste material collection from municipal operations, if applicable. The City utilizes a mobile rock crusher to recycle rock and concrete debris for future use in road construction. Contact Public Works for more information on the mobile crusher. A third party recycler may also be contacted for certain materials. Many materials may be classified as hazardous waste and should be handled according to the appropriate section below.

Aerosol Cans

Aerosol cans should be properly disposed of as hazardous waste, and a local hazardous waste disposal vendor should be contracted to transfer the materials offsite to their facility. Recycling is also an acceptable route, however cans must be punctured and emptied after final use, and the contents must be separately stored and disposed of as hazardous waste. The City is a small quantity generator of aerosol cans, mainly relating to janitorial services, and is not likely to accumulate the necessary volume to make recycling efficient.

A waste disposal vendor will typically provide either a 55-gallon steel drum, fiber drum, or fiber box for collection of aerosol cans, and this container should be placed at a location central to waste collection and storage of other chemicals. The container should remain closed and labeled as "Aerosol Cans." Once the 55-gallon limit is reached, contact the vendor within three days and have them transfer the container

offsite. Do not move the container to another offsite location. Obtain a hazardous waste manifest from the vendor and keep the records on file.

Animal Carcasses

Roadside and property management of animal carcasses is generally dictated by the location and situation, with priority given to ensuring public safety by immediately removing the carcass from the area. Carcasses should be disposed of at a Rockingham County Landfill.

Antifreeze

Place used antifreeze in a drum or tank and clearly label as "Used Antifreeze." The container should remain closed when not in use and must be in good condition, with no other fluids being added. Contract a local hazardous waste disposal vendor to transfer the container offsite when it is full, and maintain records about the vendor and the final destination of the container.

Batteries

Traditional alkaline batteries (AA, AAA, C, D, 9-volt) are not regulated by the EPA and can legally be thrown away with other, non-hazardous waste. However, types of batteries that are classified as Universal Waste and must be collected, stored, and disposed of including: Nickel Cadmium, Nickel Metal Hydride, Lithium Ion, Lithium, Mercury, Silver, Lead Acid, Lead Acid Flooded Cell Batteries, Non-Spillable Lead Acid Batteries, Sodium Batteries, and Potassium Hydroxide.

Recycling vendors are available and may provide a storage container and option to mail the materials to their location, or the batteries can be transported to the nearest recycling facility.

- Batteries to be recycled should be clearly marked as "Waste Batteries" or "Used Batteries."
- The battery collection container should have the date that the first battery is collected marked on the outside. Batteries can be stored in the container for up to one year of the marked date.
- Maintain records for the final destination of the batteries once they leave the site to a recycling facility or vendor.
- Large batteries from vehicles and equipment should be marked with dates they are taken out of service and stored in a protected area and within a secondary containment that is resistant to acid. These batteries are picked for disposal by an outside contractor.

Treated Lumber

The priority for treated timber is to first find potential for reuse in another project. If the materials are being discarded, conditions apply based on the chemicals used to treat the wood.

- *Timber Treated with Chromated Copper Arsenate (CCA)*: The Resource Conservation and Recovery Act (RCRA) exempts CCA treated lumber from hazardous waste regulation as long as the wood is in the same form it was for its intended use. Treated mulch can be taken to the Rockingham Landfill but is designated as construction debris. Third party vendor does not take treated mulch.
- *Timber Treated with Creosote*: Though not required by EPA regulation on weathered wood, a disposal facility may require Toxic Characteristic Leachate Testing (TCLP) prior to disposal. New creosote treated timber must be tested to determine if it is hazardous prior to disposal. Contact the local hazardous waste authority for further guidance on testing.
- *Timber Treated with Pentachlorophenol (PCP)*: All PCP treated timber must be tested prior to disposal. Contact the local hazardous waste authority for guidance.

Empty Containers

All empty containers should be properly stored to reduce degradation until such time as they are disposed of properly through the City's single stream collection program. Best practices include keeping the containers closed and storing them together in a covered area. Label the containers as "Empty."

Disposal of empty containers previously storing non-hazardous/non-RCRA materials such as *oils* and *diesel fuel*.

-
- Empty the containers. Use absorbents such as rags or oil dry (no liquids) to help capture the remaining material. Dispose of the containers.

Disposal of empty containers previously storing hazardous/RCRA non-acute hazardous materials or wastes such as *gasoline, low flashpoint solvents, and some paints*.

-
- Empty the containers so that the remaining residue at the bottom is one inch or less. Use absorbents such as rags or oil dry (no liquids) to help capture the remaining material. Dispose of the containers.

Containers not yet disposed of can be kept in a central, secure, storage area. Containers must be closed and clearly labeled "Empty Container – Hazardous Waste" and inspected weekly. Containers can be

stored for up to 180 days and disposed of by a hazardous waste hauler. Maintain records from the waste hauler for three years.

E-Waste (Monitors and Computers)

All computers, monitors, and other electronic waste should be properly disposed of and/or recycled through an electronic waste vendor.

Filters-Oil, Gas, Diesel, Paint

Used filters may either be disposed of as solid waste under the following conditions:

Used Oil Filters

- Oil filters can be disposed of as solid waste when punctured and drained. Drain into an enclosed container labeled "Used Oil." Maintain records of the final destination of the filters from the waste hauler for three years.

Used Diesel Fuel Filters

- Diesel fuel filters can be disposed of as solid waste when punctured and drained. Drain into an enclosed container labeled "Used Diesel Fuel." Maintain records of the final destination of the filters from the waste hauler for three years.

Used Gasoline Filters

- Used gasoline filters may also be managed according to hazardous waste requirements, at or near their point of generation with storage limits up to 55 gallons. Place drained filters into a container labeled "Used Gasoline Filters". Once the 55-gallon threshold is met, the container must be shipped off-site by a hazardous waste hauler. Maintain records of the final destination of the filters from the waste hauler for three years.

Fluorescent Lamps, HID, and Metal Halide Lights

Types of lamps that are considered as Universal Waste under the Resource Conservation and Recovery Act and must be collected, stored, and recycled include: fluorescent bulbs, high intensity discharge, metal halide, neon, mercury vapor, and high pressure sodium lights.

Lamps may be collected in an empty box the new ones came in. The lights must be securely stored and unbroken. Label the containers as “Waste Lamps” or “Used Lamps” and indicate the date the first lamp was placed there. Broken bulbs must be contained in leak proof containers. Check with the City Recycling Facilities to see if they will take broken bulbs as well as unbroken.

Dispose of the lamps at the City Recycling Facility.

Freon

EPA requires service shops to use approved refrigerant recovery equipment for repair of air conditioning systems in motor vehicles. The City technicians using refrigerant recovery equipment must be trained and certified by an EPA-approved organization.

To comply with the requirements, service shops must send the Motor Vehicle Air-Conditioning (MVAC) Certification form to EPA along with the facility name and address, name of equipment manufacturer, equipment model and serial number, and a manufacture date. Maintain records for three years of the technician certifications and the name and address of the reclamation facility.

Pesticides

Herbicides, insecticides and fungicides, etc. are all considered pesticides under EPA regulation. Containers should be stored in a covered area on impervious flooring, and containers should be segregated according to type. Ensure all containers are labeled and kept closed, and remove only the amount expected to use until the container is empty.

Never pour leftover pesticides down the sink, into the toilet, or down a sewer or street drain. Pesticides/herbicides may interfere with the operation of wastewater treatment systems or pollute waterways, where they may harm fish, plants, and other living things.

Empty pesticide containers may be managed as a universal waste and disposed of at the City Recycling Facility.

Partially Full Containers as Universal Waste

- Pesticides that cannot be completely used and the containers are partially full should be marked as “Waste Pesticide” or “Used Pesticide.”
- Contact the local hazardous waste authority or the Virginia Department of Agricultural and Consumer Affairs – Office of Pesticide Services for disposal as solid waste. Maintain a record from the waste hauler for used pesticide containers for three years.

Empty Containers for Disposal or Recycling

- Containers should be rinsed three times with potable water and disposed. Save the rinse water in separate container for future applications. If the rinse water is not reused it must be properly managed. Contact the local hazardous waste authority for guidance on proper disposal.

Partially Filled Containers Returned to the Vendor

- Some vendors may accept returned pesticides. Keep all containers clearly marked with original labeling and contact vendor for proper handling and shipment.

Fluorescent Light Ballasts (PCB and Non-PCB)

PCBs or polychlorinated biphenyls can be present in the solid potting material and in the capacitors of fluorescent light ballasts (FLB) manufactured before 1979, and these devices may still be in use with fluorescent lights in buildings from that era¹. Non-leaking light ballasts are restricted to disposal in sanitary or industrial landfills with leachate collection, liners, and appropriate groundwater monitoring. The City Recycling Facility accepts fluorescent lights.

¹ PCB-containing fluorescent light ballasts that are currently in use have exceeded their designed lifespan and pose significant risk. EPA recommends removing PCB-containing FLBs from buildings as soon as possible to prevent potential inhalation or dermal exposure.

A PCB-containing FLB failure, leak, smoking condition, or fire requires the following:

- Isolate the affected area from central ventilation and ventilate the air separately.
- Relocate persons from the affected area.
- Hire experienced cleanup personnel to clean up and decontaminate equipment and surfaces.
- Comply with environmental regulations for proper storage and disposal of contaminated equipment and cleanup materials.

Storage of Non-Leaking Equipment

- Non-leaking equipment can be stored for 30 days, after which point storage is subject to more stringent requirements.
- Dispose of the non-leaking ballasts as a solid waste at the Rockingham County Landfill.

Mercury Switches and Equipment

A mercury switch or equipment is any device containing mercury integral to its function (e.g. thermostats, appliances). Spilled or exposed mercury poses significant risk as it can evaporate and become an invisible, odorless and toxic vapor. They are classified as Universal Waste and must be collected, stored, and recycled while intact in the device.

- Collect unbroken mercury switches and equipment in an empty container marked "Waste Mercury Switch/Equipment" or "Used Mercury Switches/Equipment." Mark the outside of the container with the date the first item is placed in the container.
- Store for up to a year in the enclosed container and transfer the materials to a local recycling facility or contact the local hazardous waste authority.
- Maintain a record of the final destination of the equipment for three years.
- If mercury is spilled or exposed, isolate the area and hire experienced professionals to clean up and decontaminate equipment and surfaces.

Oil, Gas, and Diesel Waste

Waste fuels and oils must be stored in separate, enclosed drums or tanks and clearly labeled as "Used Oil," "Used Diesel Fuel," or "Used Gasoline." Each container should remain closed unless in use and should remain in a covered, secured area. Contact a recycling vendor when the container is full and maintain records from the vendor for three years.

Used oil can be burned provided that:

1. Only used oil that the facility generates or received from household DIYs is burned in the heater,

2. The space heater is rated more than 0.5 million Btu/hr, and
3. Combustion gases from the space heater are vented to the ambient air.

If the space heater does not meet all of the above requirements, Part 279, Subpart G burner standards apply.

Paint Waste-Latex, Solvent Based/OIL-BASED PAINT

Paints and liquid surface coverings such as polyurethane should be stored in containers that are clearly labeled and remain closed. Store containers in secure, covered area off the floor.

Latex Paint

Latex paint is non-hazardous and its containers may be discarded in regular trash once completely empty and does not contain free liquid. Absorbents can be used to remove any remaining free liquid, or spread the paint on cardboard or newspaper and allow the container to dry completely.

Solvent/Oil Based Paints

These paints—including stains, sealers, and associated thinning agent—should be managed as hazardous waste due to the organic solvents they contain. If minor amounts are leftover and cannot be used, use absorbents to remove any remaining free liquid, or spread the paint onto newspaper or cardboard and allow to dry completely. If the quantity is too large, contact a waste hauler and maintain records from the waste hauler of the disposal for three years.

Parts Cleaners

Low-Flashpoint Solvents

Low-flash solvents contained in parts washers become hazardous waste once the solvent becomes too contaminated to clean effectively. Unless the parts washers are under a regularly-scheduled service agreement, a hazardous waste vendor should be contacted when the solvent becomes ineffective at cleaning.

High Flashpoint Solvents

Waste solvents with a high flashpoint are not typically hazardous and can be recycled, unless the solvent is tested for pH and toxicity and is determined to be hazardous waste. Contact the vendor for related information, or contact a hazardous waste vendor for disposal. Maintain records of the final destination from the waste hauler for three years.

Aqueous Solvents

Waste aqueous solvents are typically not hazardous and can be recycled, unless they have become highly contaminated with materials from the washed parts, such as toxic metals and oils. Unless the spent liquid is tested, it should be assumed that it is hazardous and should be treated as other solvents by a waste vendor. Maintain records of the final destination from the waste hauler for three years.

Rags, Wipes, Absorbents

Disposal methods vary for rags, wipes, and absorbents, depending on the type of substance absorbed. They will either fall under the Used Oil Regulation, the Hazardous Waste Regulations, or the Solid Waste Regulations. The following describe disposal of absorbents used to capture used oil, diesel fuel, and hazardous materials.

Absorbents Used to Capture Used Oil

Waste rags, wipes, and absorbents containing oil (such as motor oil, hydraulic oil, etc.) may be discarded in the trash or laundered at an industrial facility if they are not dripping or completely saturated with oil. Materials that are saturated with used oil should be wrung out or otherwise managed to remove as much free flowing oil as possible. The extracted oil should be contained with other used oil and recycled by a vendor, and the absorbent materials can be discarded in the trash. Maintain records of the final destination of materials that are recycled from the waste hauler for three years.

Absorbents Used to Capture Diesel Fuel

Waste rags, wipes, and absorbents containing diesel fuel may be discarded in the trash or laundered at an industrial facility if they are not dripping or completely saturated with diesel fuel. Materials that are saturated with used oil should be kept in a closed container marked as "Used Absorbents." Contact a used oil vendor when the container is full, and keep records of the final destination from the waste hauler for three years.

Absorbents Used to Capture Hazardous Materials

Waste rags, wipes, and absorbents containing hazardous materials such as gasoline, solvent-based paint, and some solvents and cleaners must be managed as hazardous waste. Collect the materials into a barrel or bucket with a tightly fitting lid and marked as "Waste Absorbents." Contact a hazardous waste vendor when full, and keep records of the final destination from the waste hauler for three years.

Scrap Tires

The primary means of scrap tire disposal is recycling through a registered waste tire hauler or at a scrap tire facility. If tires cannot be recycled they can be taken to a Rockingham County Landfill. Virginia regulation states that no more than 100 scrap tires may be stored on site at any one time without a Solid Waste Permit. When the tires are transported off the site, keep records of the final destination.

Solid Waste-Trash

All solid items not recycled or managed as hazardous waste may be considered as solid waste and disposed of using a trash collection service or municipal Rockingham County Landfill. Liquids cannot be disposed of in regular trash collection service and the local hazardous waste authority, Harsit Patel should be consulted if suspect liquids are in the waste collection. Recycling vendors may collect additional liquid wastes that are not listed in this document.

Waste should be collected in bags that are securely closed and transferred to a lidded dumpster in good condition. Loose trash from unsecured collection could blow into stormwater drainage areas or come in contact with stormwater and potentially contribute pollutants into receiving waters.

Surplus and Excess Property

Materials and property that are no longer in use and stored in the City should be managed carefully so that they are expeditiously transferred to their next user or location. Materials should not be stockpiled in locations where they might deteriorate and potentially cause pollutants to enter the stormwater. Contact Jeremy Spitzer at Central Stores for information about temporary storage of surplus property.

APPENDIX A: Spill Guidance

In the Event of a Spill or Discharge

- 1. Contact the City of Harrisonburg.** Report any spill or discharge immediately to the Public Works (PW) Sustainability and Environmental Manager at (540) 434-5928. If spill is large and hazardous call The Harrisonburg Fire Department (HFD) at 540-432-7703 before City staff.
- 2. Assess the risk.** When a spill occurs, determine the risks that may affect human health, the environment and the property. This may be done easily in cases where the type of contaminant spilled is known. In situations where the contaminant is unknown, determining risks may involve some investigation. In cases where the chemical is unknown, the spilled material may be identifiable from the container label or the Safety Data Sheet.
- 3. Select personal protective equipment (PPE).** It is crucial that the appropriate PPE is chosen to stop, confine, and clean up the contaminant. Appropriate PPE may be a pair of gloves, eye and foot protection or face masks. If the chemical is not known, consult the Safety Data Sheet, or the chemical manufacturer. If the chemical remains unknown and the risk level uncertain, use the highest level of caution and protection. Refer unknown chemical cleanup to HFD and do not attempt to clean up without appropriate guidance.
- 4. Stop the source.** Stopping the source of a spill may involve turning a container upright, plugging a leak or moving an operation. In any case, the source leak or spill should be controlled as quickly as possible.
- 5. Confine the spill.** It is crucial to confine the spill before it reaches waterbodies or storm drains. In some cases, this step may need to occur before stopping the source. The proper containment measures necessary should be assessed based on the size and type of the spill. A small spill may be confined with the application of absorbent, whereas a larger spill may require absorbent pads/socks. Spill kits should be utilized where applicable to block nearby storm drains and prevent the movement of the spill. If a large spill of fuel, sewage or other hazardous materials occurs, contact HFD to assist in response and cleanup.
- 6. Evaluate the incident and implement cleanup.** Once the spill is stopped and confined, the person responsible for cleanup should develop a plan of action to cleanup the spill. The person conducting the cleanup should make sure that they have enough spill response supplies to adequately deal with the spill. Once the chemical is cleaned up or the absorbents are saturated, they may contain hazardous

waste and should be disposed of properly. See the Waste Management and Disposal section of SOP manual for disposal guidance.

APPENDIX B: Reportable Discharge Form

Illicit Discharge Reporting Form- City Facilities			
Incident Type:			
Suspect <input type="checkbox"/> Potential <input type="checkbox"/> Actual <input type="checkbox"/>			
<p><u>Potential Illicit Discharge:</u> A pollutant having entered the storm sewer system but there is no evidence that the pollutant entered a live waterway (blue line).</p> <p><u>Actual Illicit Discharge:</u> A pollutant having entered the storm sewer system and there is evidence that the pollutant entered a live waterway.</p> <p><u>Suspect Illicit Discharge:</u> A dumping activity or spill that has not entered the storm sewer system or a live waterway.</p> <p><u>Storm Sewer System:</u> includes ditches, storm drains, inlets, curb and gutter, the street, stormwater BMPs</p>			
Reporter Information			
Report taken by:		Report Date:	
Department:		Report Time:	
Rainfall in past 24-48 hrs:			
Incident Location			
Tax Map #:		Northern/ Easting:	
Stream (HUC) Address:		Outfall # (if applicable):	
Closest Street Address:		Nearby Landmark:	
Primary Location Description		Secondary Location Description	
<input type="checkbox"/> Stream Corridor <i>(in or adjacent to stream)</i>		<input type="checkbox"/> Outfall	<input type="checkbox"/> In-stream flow
		<input type="checkbox"/> Along banks	

<input type="checkbox"/> Upland Area (land not adjacent to stream)	<input type="checkbox"/> Near Storm Drain	<input type="checkbox"/> Near other water source (stormwater pond, wetland etc):	
Narrative description of location:			
Upland Problem Indicator Description			
<input type="checkbox"/> Dumping	<input type="checkbox"/> Oil/solvents/chemicals	<input type="checkbox"/> Sewage	
<input type="checkbox"/> Wash water, suds, etc.	<input type="checkbox"/> Other(Describe in narrative section):		
Stream Corridor Problem Indicator Description			
Odor		Appearance	
<input type="checkbox"/> None	<input type="checkbox"/> Sewage	<input type="checkbox"/> "Normal"	<input type="checkbox"/> Oil Sheen
<input type="checkbox"/> Sulfide (rotten eggs, natural gas)	<input type="checkbox"/> Rancid/Sour	<input type="checkbox"/> Cloudy	<input type="checkbox"/> Suds
<input type="checkbox"/> Petroleum (gas)	<input type="checkbox"/> Other	<input type="checkbox"/> Other(Describe in narrative section):	
Floatables			
<input type="checkbox"/> None	<input type="checkbox"/> Sewage	<input type="checkbox"/> Algae	<input type="checkbox"/> Dead fish
<input type="checkbox"/> Other			
Narrative description of problem indicators:			
Estimated quantity discharged, released or spilled:			
Investigation Information (to be completed by PW Stormwater Staff)			
Lead Investigator:	Department:	<input type="checkbox"/> Closed	
Date Closed:	Closed by:		
Summarize Resolution :			

SWPPP Review (to be completed by PW Sustainability and Environmental Manager)	
The permittee shall review the contents of any site specific SWPPP no later than 30 days after any unauthorized discharge, release, or spill reported in accordance with Part III G to determine if additional measures are necessary to prevent future unauthorized discharges, releases, or spills. If necessary, the SWPPP shall be updated no later than 90 days after the unauthorized discharge	
Incident meets reportable criteria in Part III G:	<input type="checkbox"/> Yes incident meets reportable criteria <input type="checkbox"/> No incident does not meet reportable criteria
SWPPP Review Needed:	Date of SWPPP Review:
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Did response follow SWPPP Procedures:	<input type="checkbox"/> Yes <input type="checkbox"/> No
If no, explain:	
Are additional measures needed:	<input type="checkbox"/> Yes <input type="checkbox"/> No
If yes, explain what measures are needed:	
SWPPP Updated:	Date SWPPP Updated:
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Additional Observations:	

Appendix K: Stormwater Pollution Prevention Training Plan

Training Procedure

SOPs have been developed that cover:

- Bulk Storage Areas (Stockpiles)
 - Dewatering Operations
 - Discharge of Wastewater
 - Disposal of Waste Materials (Landscaping)
 - Equipment Maintenance
 - Fertilizer and Pesticide Applications
 - Leaking Automobiles & Equipment
 - Municipal Wash Water
 - Prevent Illicit Discharges
 - Road & Street Maintenance
 - Spill Kit
-
- The City of Harrisonburg stormwater management team will distribute the aforementioned SOPs to each departmental supervisor in a designated 'Stormwater Binder'.
 - Other stormwater-relevant materials such as Spill Incident Report Forms, Oil/Water Separator Inspections, and Stormwater Site Inspections can be kept in this binder.
 - Binders will be placed in an accessible location for all employees to reference.
 - SOPs are also available on the City intranet (C2) system accessible by all City of Harrisonburg employees.

Employees Required to Take Training:

6.m. The permittee shall develop a training plan in writing for applicable staff that ensures the following:

- Field personnel receive training in the recognition and reporting of illicit discharges no less than once per 24 months;
- Employees performing road, street, and parking lot maintenance receive training in pollution prevention and good housekeeping associated with those activities no less than once per 24 months;
- Employees working in and around maintenance, public works, or recreational facilities receive training in good housekeeping and pollution prevention practices associated with those facilities no less than once per 24 months;

(7) Employees whose duties include emergency response have been trained in spill response. Training of emergency responders such as firefighters and law-enforcement officers on the handling of spill releases as part of a larger emergency response training shall satisfy this training requirement and be documented in the training plan.

Training Presentation:

Basic Pollution Prevention Training

- An overview of water quality and local waterway impairments.
- Definition of MS4
- Basic pollution prevention procedures and spill response procedures.
- Illicit discharge detection

Advanced Pollution Prevention with SWPPP Training

- An overview of water quality and local waterway impairments.
- Definition of MS4
- Basic pollution prevention procedures and spill response procedures.
- Illicit discharge detection
- Information on what is in a SWPPP and one short video on maintenance

Training Schedule & Tracking:

Trainings will be posted on the City’s online training platform, VectorSolutions (formally TargetSolutions). Generally, trainings will be given April/May each calendar year to departments in that year’s rotation. A record of employee completion will be available through the training platform. For departments not within the City’s organization, but covered under the City’s MS4, training sign-in sheets will be maintained.

Year A Training (Even numbered years- based on April)		Year B Training (Odd numbered years- based on April)	
Department	Training*	Department	Training*
Fire Department	PP w/ SWPPP	HEC ^α	PP w/ SWPPP
Transit Department	PP	City Schools (Facility Management) ^α	PP
Police Department	PP	Parks and Recreation (Site Supervisors, Golf, Ramblewood Athletic Complex)	PP w/ SWPPP
Community Development	PP	Public Utilities	PP w/ SWPPP
Public Works	PP w/ SWPPP		
*PP= the basic Pollution Prevention training			

PP w/ SWPPP= the advanced Pollution Prevention with SWPPP training

α Department is covered under City MS4 permit, but not fully within City organization therefore are not in VectorSolutions. Training given either in person or PowerPoint distributed to them. Must sign in with a sign-in sheet.

Last updated: 6/2022